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## **An examination of facilitators and inhibitors to knowledge sharing in a policing environment : lessons from intelligence-led crime management units of the Western Australia Police Service**

Vince Hughes  
*Edith Cowan University*

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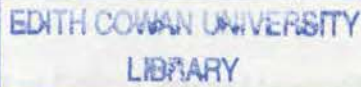
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**Edith Cowan University  
Faculty of Business and Public Management  
School of Management Information Systems**

**Title**

**"AN EXAMINATION OF FACILITATORS AND INHIBITORS TO  
KNOWLEDGE SHARING IN A POLICING ENVIRONMENT: LESSONS  
FROM INTELLIGENCE-LED CRIME MANAGEMENT UNITS OF THE  
WESTERN AUSTRALIA POLICE SERVICE."**

**Thesis for Degree of**

**Doctor of Business Administration (Information Systems)**

**Submitted by**

**Vince Hughes (0952277)**

**Principal Supervisor-Dr Paul Jackson**

**Associate Supervisor – Professor Peter Love**

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.



## **Abstract**

The objective of this research project was to gain an understanding of the inhibitors and facilitators to knowledge sharing within a policing environment. Although it did not begin with the intention of applying interventions of any kind, in the course of the thesis it became clear that a form of action research was being employed. Initially, I presented my research proposal as a hermeneutic examination of the facilitators and inhibitors to knowledge sharing in the Western Australia Police. However, somewhere along my research journey I realised that rather than me simply collecting and analysing data from and about my colleagues, we had all become part of the process of changing, acting and reflecting. This is when my hermeneutic approach crossed paths with action research. Using this dual approach, my research explored knowledge sharing in the Western Australia Police within three separate but integrated dimensions; historical, current and future.

The historical exploration highlighted complex relationships between the internal and external forces that have impacted the evolution of knowledge management strategies within the Western Australia Police. It also provided the context of the historical influences on the outcomes within the current environment.

My research within the current environment found eight distinct but interrelated factors that have influenced knowledge sharing between individuals. I established that knowledge sharing operates in a highly complex system of ecological entities with unique interrelationships that are difficult to visualise and capture.

The future perspective explored the concept of developing communities of practice (CoPs) for police officers as a response to the crystallization of the eight inhibitors. I called this section CoPs for COPS. This section was not initially anticipated in my research proposal. The need emerged later in my research when I discovered police officers required an opportunity to discuss and share knowledge without the constraints of the entrenched command and

control police management style. The outcome exposes managers to a new management philosophy that can be used to enhance and complement existing management models. The CoPs for COPS framework provides a useful methodology that can be helpful in assisting police managers operate in a global investigative environment. It also provides a way of spanning organisational and hierarchical boundaries to harness and share knowledge.

The findings of this thesis are a strong contribution to understanding knowledge management and sharing in a policing environment. I have no doubts that these findings will not only add to the theoretical body of knowledge, they will also be a useful heuristic that will assist police managers in understanding the complexities of knowledge sharing and provide ways in which these complexities can be addressed. The findings may also be beneficial to other researchers and public sector managers who may be interested in applying the outcomes to the broader public sector environment.

It will not be easy to make the changes required to address the existing inhibitors through measures such as communities of practice. However, no matter how difficult it is, both socially and organisationally, it will be worth the effort. It is from these learning outcomes that others can gain an understanding of the knowledge sharing phenomenon within policing; it is from the many unanswered questions that interested researchers can begin to explore the phenomenon in greater detail.

## Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- (ii) contain any material previously published or written by another person except where due reference is made in the text; or
- (iii) contain any defamatory material.

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Signed \_\_\_\_\_

Date 17.11.05

## Acknowledgements

A body of work of this size cannot be achieved without the direct and indirect help of many individuals. While this research has taken me close to three years to complete, for my family it is the culmination of 10 years of study including of my undergraduate and master's degree. To that end, I thank Kate my wife without your endless support this would not have been possible, now it is your time.

I would like to thank also my children Paula and Kevin, who have spent most of your lives with me studying and have come to expect that that is normal behaviour – listen to your Mother; it is not. Now I can spend more time with you both. Paula, after this, teaching you to drive will be bliss, and Kevin my football skills might even surprise you.

A sincere thank you to all my work colleagues who agreed to be part of this research, read drafts of my thesis, suggested improvements but most of all supported and encouraged me to continue.

Finally, I would like to pay a special tribute to my supervisor Paul Jackson. Paul I prefer to call you my 'super advisor' rather than my supervisor. Not only did you provide the glue that was needed to stick my ideas together, you knew when to push me, when to pull me and when to stretch me – Paul thank you.

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## 1. Chapter One - Introduction

### 1.1. Confronting my Research

## Chapter 1 - Introduction

The writer stares glumly at a blank sheet of paper (or, in the electronic version, a blank screen). Usually, however, this is an image of a writer who hasn't yet begun to write. Once the piece has been started, momentum often helps to carry it forward, even over the rough spots  
(Behrens & Rosen, 1997).

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# 1. Chapter One - Introduction

## 1.1. *Contextualising my Research*

The rationale for this thesis started in 1980 when, I joined the Garda Síochána (Republic of Ireland Police Service). During the following 18 years, I observed reluctance among individual police officers, especially those involved in an investigative capacity, to share knowledge. While I thought this reluctance was peculiar to the Garda Síochána, I found a similar situation within the Western Australia Police, which I joined in 1998, and the Australian Crime Commission (previously National Crime Authority) to which I was seconded for a number of years. Recent observations indicate similar reluctance extending at national and international levels. For example, a lack of knowledge sharing was one of the key findings of the report on the 2001 terrorist attacks on the United States (9/11-Commission, 2004). In addition during a 2001 Courts Subcommittee Hearing on communication problems between FBI and Local Law Enforcement agencies, New York Senator, Charles Schumer maintained that one of the worst kept secrets in law enforcement was the chronic lack of communication and sharing of information between federal and local agencies (Senate Hearing 107, 2002).

It was not until I was introduced to the concept of knowledge management, during my Master of Business Administration days, did I give any thought to exploring this phenomenon further. The trigger to explore the trend in any detail came about after reading a number of articles relating to Doctor of Business Administration (DBA) degrees in Australia (Erwee, 2002; Nimmon & Woods, 2002). I was attracted to the concept of a DBA degree in that they are designed to assist professionals to investigate problem areas of their practice underpinned by a research philosophy. In addition I also felt that I fit neatly into Nimmon & Woods' (2002) classification of DBA students as being mature candidates with considerable levels of work experience, usually part time, fitting in their study alongside their work and other domestic commitments. I was also

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interested in the assertion that a primary aim of the DBA structure is to assist busy managers in profit or non-profit organisations, who want a qualification that delivers them as both academics and organisational leaders. This “dual qualification” (Hay & Bartunek, 2002) can be achieved by identifying and resolving industry related problems through theoretical and applied knowledge construction and reflection.

However, my research awakening came about at one of my introductory DBA classes during an impromptu debate between four academics relating to research methodologies, research approach and writing style. This debate was fascinating in that I began to realise that while each academic had consistent views regarding research rigour and relevance, they had developed varying philosophies and approaches to achieve those outcomes. It became clear to me during this debate that research students do not have to rely solely on the traditional positivist approach or isolate themselves from their natural environment to conduct credible research. In fact, they can achieve rigorous, relevant, timely and realistic studies by identifying emerging phenomena within their own industry. This interaction between student-academic, student-employee and industry is effective because not only does it provide access to rich data sources, it also allows for the observation of “complex organisational environments where many important variables are at play” (Fernandez, Lehman, & Underwood, 2002, p. 111).

This style of research falls within the design of the action research philosophy as espoused by Dick (1997), Reason (2001), Sankaran (2001), McNiff, Lomax & Whitehead (2003) Reason & Bradbury (2004) and Williams (2004). It is generally conducted by practitioners who regard themselves as researchers with a focus on learning in collaboration with other people. In essence, it is insider research. Action research has both a personal and social aim. My personal aim was to improve my organisational insight through involvement with my colleagues. The social aim of this research was to assist organisational improvement through work related interventions based on the new insights and concepts (McNiff, Lomax, & Whitehead, 2003).

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I have applied the professional action research method to this thesis by combining rigorous research with practical application to an industry issue and linked this educational experience directly with my own workplace experience (Erwee, 2002; M. C. Williams, 2004). To that end, this thesis, explored the facilitators and inhibitors to knowledge sharing in a policing environment, specifically concentrating on intelligence-led crime management portfolios.

The benefits of conducting this research within my own work environment allowed me to become actively involved in the research process rather than acting as a distant passive spectator and proved advantageous to my other work-related projects. For example during my research, I was appointed manager of a number of research projects including the *salary review* and *police service delivery standards*. These projects had many similarities to my research and at times appeared to blend into each other. My findings from the knowledge sharing research assisted and enhanced my other projects in that they not only provided me with a basis to develop a research model and questionnaires, they also proved to be a very useful reference when making final recommendations.

As action research is essentially an uncontrolled experiment, I was faced with the classic problem many face with action research – determining what has actually changed in the course of the project. I found at times that it was difficult for me and my colleagues to separate the research project from my actual working projects. While I did conduct formal interviews, many *ad hoc* conversations emerged in different settings relating to my research. To address this problem I had to remind myself constantly to inform my colleagues that such data may be used in my research. This approach worked well and not only did it act as way to draw the line in the sand between my research and work projects, it also addressed the ethical aspects of my research in that colleagues could refuse to become involved.

I collected data for this thesis based on an interpretive case study philosophy. This approach was underpinned by reflective practitioner and hermeneutic interpretation (Klein & Myers, 1999). This combination of reflective practitioner

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and hermeneutic interpretation facilitated the combination of rigorous research with practical application. In addition, it enabled both academic and professional empowerment by providing a greater understanding of work practices and the reasons why some work place practices inhibit knowledge sharing were conducted (Erwee, 2002; Perry, 1998a; M. C. Williams, 2004). In the spirit of action research and the Doctor of Business Administration degree, I argue that an outcome of enriched practice and practical living theory has been achieved (McNiff et al., 2003). Along with influencing a number of internal and external organisational and individual changes, I have also provided eight factors as the empirical evidence.

## **1.2. Background to the Research Problem**

*The very concept of society's capital base is in the process of changing once again. The skills of the hunter, which gave way to those of the farmer and the miner, are now moving toward those who master information - (Walter Wriston, Retired Citicorp CEO, 1987)*

The above quote is apt in that it succinctly sets the context of the evolution from the hunter and gatherer society through to the industrial society and the information and knowledge society. This evolution to the knowledge based economy coupled with the continual increase in information communication technology (ICT), poses both challenges and opportunities for the private and public sectors (Cong & Pandya, 2003). For example, the ability to gather business intelligence has been enhanced with the increasing power of technology (Raeside & Walker, 2001). Accordingly, in an effort towards competitive advantage, companies are concentrating more on collecting and storing information, about the world in which they operate, by investing in information technology (IT) and information systems (IS). Many of these systems are being used to manage the ever increasing amount of organisational information in an effort to glean knowledge that can be leveraged for a competitive edge (Cody, Kreulen, Krishna, & Spangler, 2002).

The same interest in the collection of information and investment in information communication technology (ICT) is true of public sector organizations that are

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also concerned with the management of information; how it is collected, stored and used (Jarman & Nutley, 2001). In particular, the investment is evident in police agencies, who over the past two decades, have endeavoured to implement the concepts of the 'learning organisation' (M. M. Brown & Brudney, 2003). The learning organisation is characterised by the commitment to the principles of sharing, innovating, critical review and systemic thinking. An organisational culture is nurtured, in which adherence to such principles is articulated, encouraged, rewarded and highly regarded. This philosophy is expressed in the writings of Peter Senge, Donald Schön and Chris Argyris.

The claim made by 'productivity paradox' proponents that investments in IT, to date, have not produced significant improvements in industrial productivity (Ives, 1994)."appears to be pertinent in the policing environment (Ackroyd, 1993; Chan, Brerton, Legosz, & Doran, 2001; Dupont, 2001; Enders, 2001). Police information systems are being developed to assist with the management of the information, however, the emphasis, similar to many private organisations, has tended to concentrate on the collection of data, which appears to be at the expense of leveraging employees' knowledge (Malhotra, 2002).

It can be argued that within the policing environment, this emphasis on data collection is due to an ever-increasing capacity to store data but without the parallel increases in the capacity of employees to absorb, digest and analyse such data to create new knowledge. This argument is supported as Tiwana (2000) says, "At first, we had too little [information]. We asked for more and we got it. Now we have more than we want ... but what we were looking for in the first place was knowledge" (p 4).

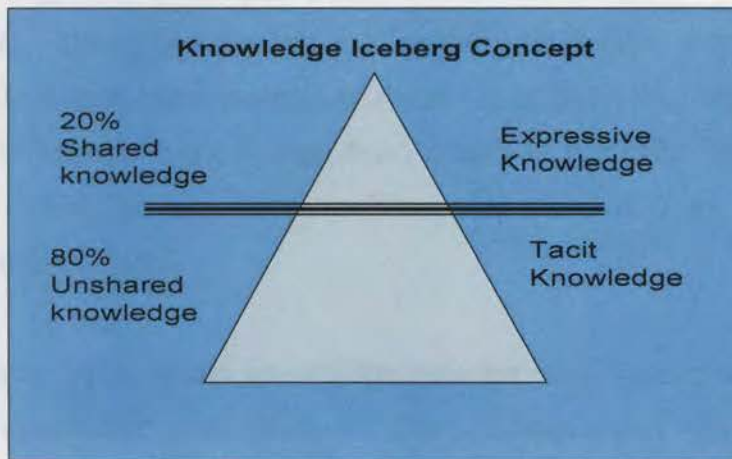
Many organisations are recognising that ICT based competitive advantages are transient and limited and that physical assets generally do not create value (Lev, 2001). They are also acknowledging that the information superhighway has now transported organisations into the 'knowledge economy' and as such, are now strong in their assertions that knowledge is the basic ingredient underlining the success of contemporary organisations (Wiig, 1994). To that

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end it is argued that, coupled with ICT, sustainable competitive advantage lies within the minds of employees and the knowledge they possess (Black & Synan, 1997). This point was raised by Drucker (1993) who maintained that employees are the brains of the organisation - they know how to set up company infrastructure, keep it going, and improve upon its structure. This argument is supported by McKinlay (2000) who found that the primary repository of organisational knowledge lies within employees. However this knowledge is elusive and can be problematic to access and leverage (Drucker, 1988; Goldblatt, 2000; McKinlay, 2000).

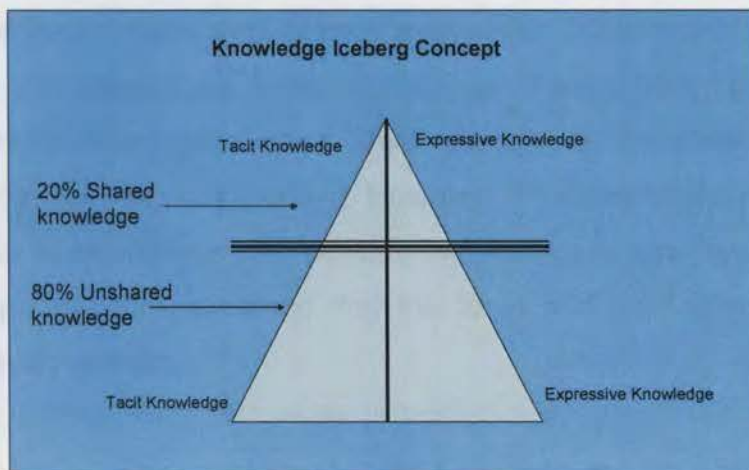
Goldblatt (2000) explains the difficulty in accessing employee knowledge by using the analogy of an iceberg. He argues that the easy-to-access knowledge represents the tip of the iceberg or 20 percent of an employee's knowledge base and is what Nonaka & Takeuchi (1995) refer to as 'explicit' or expressive knowledge. It is formal, relatively easy to use, and is usually codified or written and includes knowledge such as industry specific manuals, instructions or policies and procedures. The important knowledge is the remaining 80 per cent that remains in employees' minds and is symbolised by the remaining ice under the water. This knowledge is referred to by Nonaka & Takeuchi (1995) as 'tacit' knowledge. Knowledge in its tacit form is described as personal knowing, generally gained through experiences and cannot be easily formulated, articulated and communicated and therefore can be difficult to capture (Nonaka & Takeuchi, 1995; M. Polanyi, 1966). One reason posited for this difficulty is that tacit knowledge is embedded in people's "neuroanatomy" (Boisot, 1998, p.42).

Goldblatt (2000), further argues that while employees may be willing to share the tip-of-the-iceberg knowledge, they are hesitant to part with what remains below the water. He maintains that this knowledge is what gives employees currency or bargaining power and the knowledge they do not share is what distinguishes them from other employees – see Figure1 below



**Figure 1 - Knowledge sharing iceberg**

In addition, tacit and explicit knowledge are not dichotomous states of knowledge; both are mutually dependent and present (Alavi & Leidner, 2001). It would appear then that by tapping into the 20% portion you are accessing both tacit and explicit knowledge. Accordingly, an enhancement of the principle would include both types of knowledge as illustrated below.



**Figure 2 - Knowledge sharing iceberg tacit and explicit knowledge**  
 Developed for this research based on Goldblatt (2000)



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A challenge for employers is to get employees to share this untapped knowledge. As Davenport puts it "If my knowledge is a valuable resource, why should I share it? If my job is to create knowledge, why should I put my job at risk by using yours instead of mine? ...to enter our knowledge into a system and to seek out knowledge from others is not only threatening, but also just plain effort, so we have to be highly motivated to undertake such work" (Davenport, 1998).

While failing to share knowledge may be beneficial to some employees, it can lead to reduced productivity for the organisation as a whole (Van Den Hooff & De Leeuw Van Weenen, 2004). This situation presents two challenges to police managers. The first is to get workers to realise and understand what they know, the second is to implement initiatives so that employees are willing to share what they know for the advantage of the organisation (Hall, 2003; McDermott & O' Dell, 2001; Wiig, 1995).

I have observed that the discontinuous changing nature of criminal activity and criminal methodologies, especially globalised crime, persistently confound police investigators. When a solution to one problem is found, another problem appears. Yet, if the assertions of Goldblatt (2000) are even partially correct, many of the solutions may already exist within the minds of police employees. If that is the case, then following on from Hall (2000), the ability for police managers to leverage even a small portion of the untapped and unshared knowledge-iceberg is important. However, I believe that before any efforts can be made to encourage and facilitate the sharing of employees' tacit knowledge, it is important to understand first the tools and the factors that facilitate and inhibit such sharing.

Knowledge management theory tells us that there are a number of factors that inhibit and facilitate sharing. Many of these factors are determined by components of specific organisational behaviours (Broadbent, 1998; McDermott & O' Dell, 2001). Therefore, determining which factors promote or impede the sharing of knowledge within particular groups and organisations constitutes an

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important area of research (Van Den Hooff & De Leeuw Van Weenen, 2004). By integrating the knowledge management and policing theory, this thesis explored the facilitators and inhibitors to knowledge sharing specific to policing in a crime management environment. It resulted in outcomes that are academically, practically, organisationally and personally significant.

### **1.3.      *Research Problem***

So, my history has delivered me to this point where I have seen and grappled with the puzzle of knowledge sharing within policing. By combining my personal experience and the frames of reference provided to me by my academic training, I have formulated my principal research question to be:

*What lessons can be learned from examining the facilitators and inhibitors to knowledge sharing in intelligence-led crime management within the Western Australia Police?*

### **1.4.      *Summary of Learning Outcomes***

This section presents the synthesis of my action research and learning. Different lessons are learned depending on the perspective of the learner. See figure 3 – below.

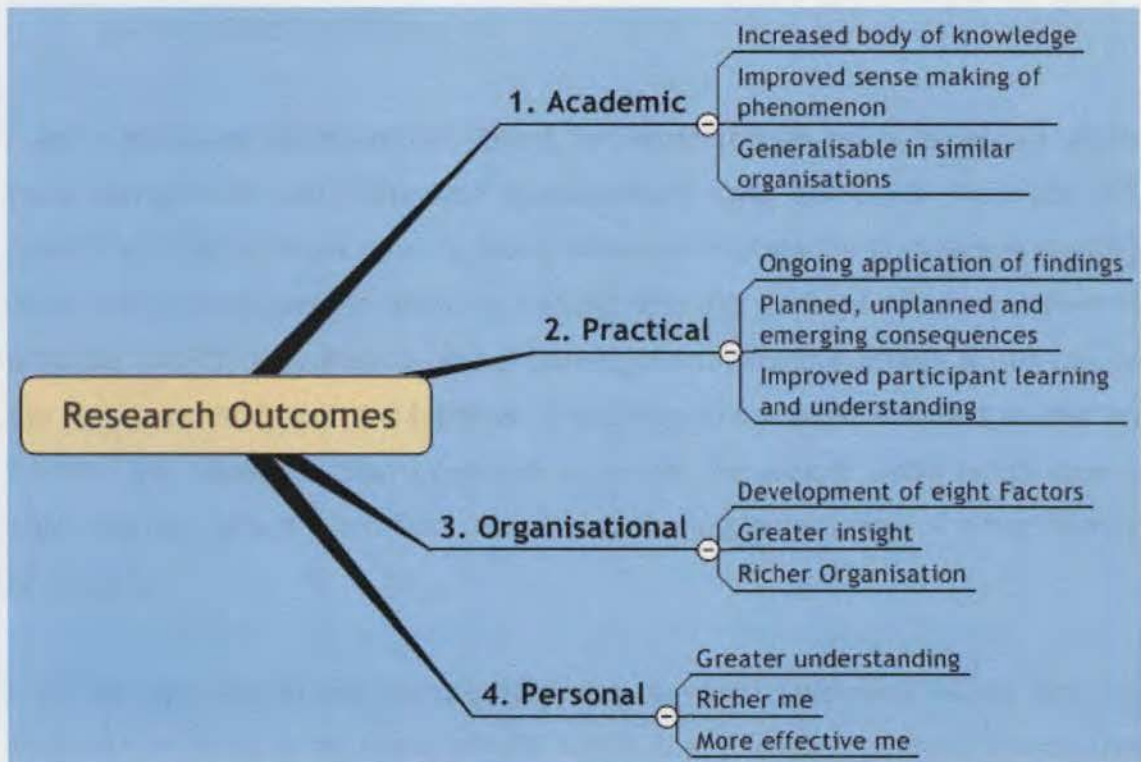


Figure 3 - Summary of research learning outcomes

From an **academic perspective**, the learning outcomes indicate that the concept of knowledge management and specifically knowledge sharing, within a policing environment, operates in a highly complex ecology of entities with interrelationships that are difficult to capture. For example, while I present eight overarching factors that have a facilitating or inhibiting influence on knowledge sharing, within each of these factors other influencing mediating relationships are evident. I believe that these eight factors add to my 'living theory' about a particular work related phenomenon (McNiff et al., 2003; Whitehead, 1989). I make this assertion based on the knowledge that my research can be validated by the standards of judgement used by to verify such claims (Whitehead, 1989). Throughout this thesis, it will be shown that:

- The enquiry was carried out in a systematic way;
- The values used to distinguish the claim to knowledge are clearly shown and justified;
- The assertions are clearly warranted; and

- 
- Evidence is presented throughout of an enquiring and critical approach to a work-related problem.

From a **practical perspective** I found that, even though police agencies abide by a hierarchical and command management style approach, they are still positioned well to move outside that framework to enhance knowledge sharing when the need arises. In addition, I found that the concept of communities of practice (CoPS) to enhance global investigations would address a number of the command and control inhibitors. In addition to the eight knowledge sharing factors, this research also proposes an initial framework upon which police agencies can reflect when first considering the implementation of a community of practice.

From an **organisational perspective**, the research outcomes reveal that the evolution of knowledge management within the Western Australia Police has been influenced by a number of complex relationships between internal and external social, technical and political forces. The outcomes also indicate that while the police service has been progressing towards an effective knowledge management infrastructure, external factors especially government policies have had a constraining impact on that progression. The outcomes of this thesis indicate that there is a need for harmonisation of police service strategies and government policies, otherwise the development of an intelligence-led or knowledge sharing policing philosophy may well be frustrated. This research was also responsible for providing an unintended but constructive open space for communication and dialogue between colleagues. This participative space assisted in creating effective enquiry and greater understanding of the phenomenon of knowledge sharing in policing.

From a **personal perspective**, I have endeavoured, for the past ten years, to align academic and work related pursuits. I have no doubts that this research thesis, through the action research process, has added to this quest. Figure 4 below represents the various stages of what can best be described as my learning journey over the past 25 years. It begins in 1980 when I joined the Irish Police where I worked for 10 years as an operational police officer. During this

stage of my career, I learned the operational skills of policing. The next stage was my appointment as a sergeant in 1990. This was my first introduction to management. During this time, I felt a need to understand the theory underpinning the practice of police management and in 1994; I enrolled in a Bachelor of Social Science (Police Studies). This degree was later supplemented with a Master of Business Administration. It was during this period that I began to apply my newfound body of knowledge as a police reformer within the Western Australia Police. The period during my research thesis 2002 – 2005 introduced me to the concept of action research and reflection. I highlight this period as my action and learning journey – the alignment of theory and practice.

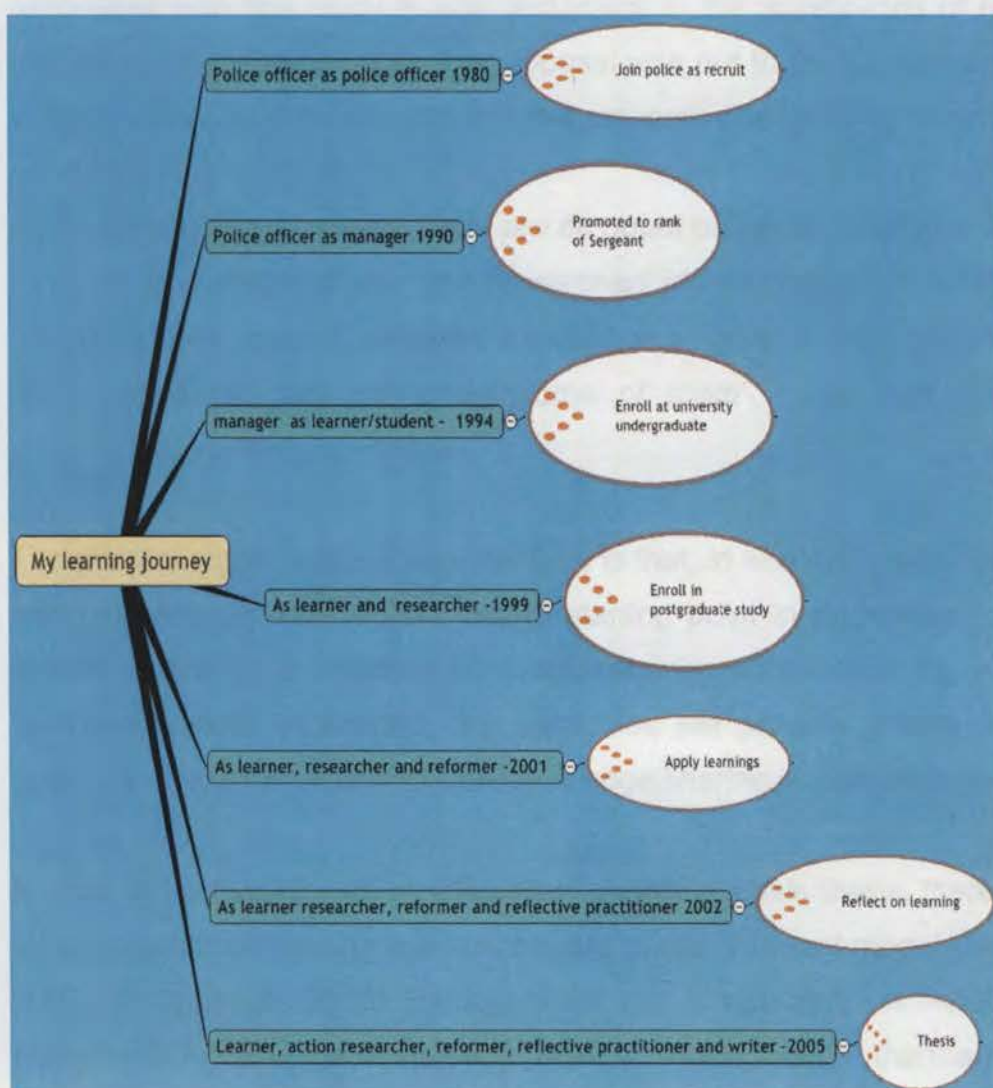


Figure 4 - My action and learning journey

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## **1.5. Significance of this Research**

Many writers in the field of knowledge management affirm the importance of knowledge sharing within organisations (Fernie, Green, Weller, & Newcombe, 2003). It is argued that the organisational value of knowledge increases when it is shared and that determining the factors deemed to promote or impede knowledge sharing within organisations is an important area of research (Van Den Hooff & De Leeuw Van Weenen, 2004).

The fact that the Western Australia Police Service has indicated its desire to be associated with this study is also testament to the significance of research in this area. For instance, when the proposal was put to the Commissioner of the Western Australia Police to endorse this research one of his comments was:

*"[A]s with any agency there are no doubt problems relating to the sharing of knowledge, if you [the researcher] identify problems for this agency and can suggest solutions, it would be a valuable piece of work. - better still if we can implement some of them". - (Dr Karl O'Callaghan, Commissioner of Police).*

The primary significance of this research is that, in line with my action research and hermeneutic approach, a useful starting point in understanding the key factors facilitating or inhibiting knowledge sharing within a policing environment has been made. In addition, the outcomes will provide greater insight and understanding of ways to facilitate knowledge sharing in a policing environment.

In accordance with the interpretive position taken in this thesis, there should be no expectation of viewing the results as a single coherent model (Fernie et al., 2003; McNiff et al., 2003). The significance of this research is related more to sense making and understanding (Weick, 1995), rather than arriving at a definitive conclusion.



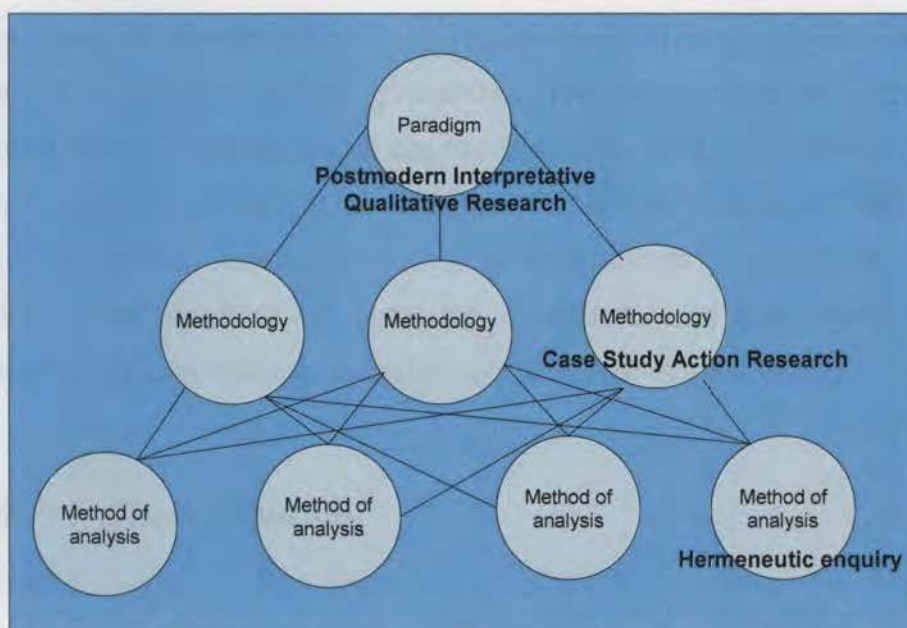
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At the same time, these rich insights will assist in introducing police managers to a new management philosophy that can be used to enhance and complement existing management models to achieve strategic outcomes (Wiig, 1995). These insights also present a useful heuristic that will be helpful in assisting managers in not only leveraging knowledge, but also in exploiting new technologies and establishing strategic priorities for current and future technology applications concerning knowledge sharing. In addition to paving the way to utilising knowledge efficiently and effectively, the findings also act as means of empowering police officers. This empowerment will facilitate improved individual and collective inputs, leading to enhanced police service delivery outcomes.

## **1.6.     *Methodology***

As previously mentioned, my methodology falls within the design of the action research philosophy. The method used to analyse the data in this thesis is hermeneutic enquiry as espoused by Packer & Addison (1989) and Kellehear (1993). This approach is given additional rigour by using the seven principles of hermeneutic enquiry as suggested by Klein & Myers (1999). I would like to point out at this stage that in my initial methodological approach I did not plan to embrace action research – it embraced me. This methodological inclusion is discussed in detail in Chapter 3.

Hermeneutics' is derived from the Greek word 'hermeneuein', meaning to interpret and is simply the art and study of interpretation. It is a useful research approach "when the central issues concern the nature of meaning, experience and power" (Kellehear, 1993, p. 42). This methodology was successfully used by Froyland (1991) and O'Callaghan (1997) within policing organisations. Others such as Lee (1994) and Lacity, Janson (1994) and Standing & Benson (2000) have used it in information systems research. The following figure gives a linear static illustration of my research approach. A detailed explanation of this methodology and a more dynamic representation is presented and discussed in the methodology chapter.



**Figure 5 - Research choices you have to make - paradigm, methodology, methods.**

Adapted from (Dick, 1993)

## 1.7. Writing Style

To capture the true nature of the relationship between study and insight, the style of writing used in this thesis incorporates a reflective post modernist approach using first person and second person accounts to explain my findings. My style is influenced by the writings of McNiff, Lomax & Whitehead (2003) who maintain that in action research, the researcher is the core of the research and it is therefore about 'your action' and not the 'action of others' – in other words it is referred to as 'first person research' (p. 20). They further assert that this emphasis on the 'living person' shows how individuals can take responsibility for themselves and the environment in which they are researching. In addition Reason and Bradbury (2004) maintain that action research also champions 'second person' inquiry practices, drawing in particular on the family of approaches called co-operative inquiry in which a face-to-face group of co-researchers engage together in cycles of action and reflection. Accordingly third person accounts, which are preferable in traditional research paradigms, will be used sparingly in this thesis.

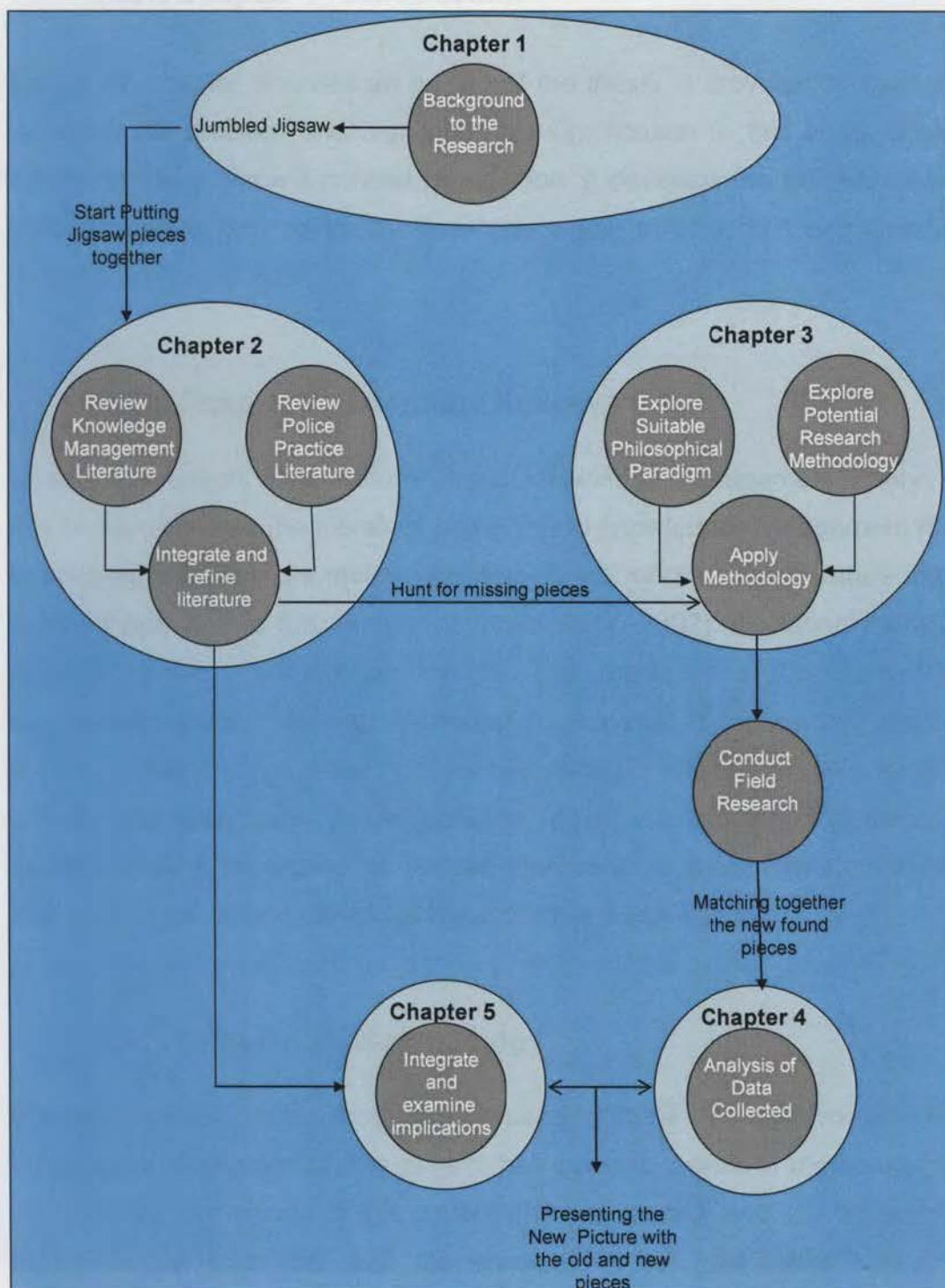


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This writing style also assists in furthering both the readers' and my own understanding of the situation through a process of professional insights and self reflection. These insights, presented through a series of narratives, is consistent with the philosophical approach to DBA research which emphasises a blend of theory, practice, and reflection (Mintzberg & Gosling, 2002; Morley, 2002). In addition to acting as a source of understanding, narratives can help in disrupting entrained thinking, providing a repository of learning and allowing confession of failure without attribution of blame (Snowden, 2001) .

### **1.8.      *Thesis Outline***

While my writing reflects a post modernist style the structure of my thesis ~~is based~~ is based on a more traditional style five chapter Doctor of Business Administration thesis as espoused by Perry (1998b) which comprises an introduction, literature review, methodology, analysis of data and conclusion. The rationale for this approach was based on two considerations. The first consideration was that it allowed me present a report which conformed to the academic conventions of my institution. The second was that it provided me with the scope to communicate my journey of self reflective learning and how I have endeavoured to improve others and myself within my professional practice. Using the analogy of a jigsaw puzzle, Figure 5 illustrates the composition and the basis for such structure.



**Figure 6 - A structured chapter approach to my DBA thesis**

Developed for this research based on Perry(1998b) Benton (2002) and Neary (2004).

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### **1.8.1. Chapter 1 - Introduction**

This initial chapter provides an outline of the thesis. It provides an overview of the research problem and highlights the significance of this study. Here the overall thesis is given a context. In addition, it develops the framework for the thesis to move forward to the literature review through to the methodology, analysis and conclusion.

### **1.8.2. Chapter 2 - Literature Review**

Chapter 2 presents a literature review of knowledge management theory. While this review explores the literature pertaining to knowledge management relating to policing, this literature review was determined more by the literature that was deemed relevant as the study proceeded (Dick, 2002). Additional literature is provided in chapters three four and five. The overall aim of this review was for me, as the researcher, and subsequently the reader to not only develop a critical understanding of the field of knowledge management and knowledge sharing but specifically its relationship within the policing profession. This discussion sets the scene for further exploration of the information collection and knowledge creation and sharing within the police service.

### **1.8.3. Chapter 3 – Methodology**

Chapter 3 deals with the methodology used to gather the data sources for this thesis. The challenge for this project has been to devise a methodology that captures the complexity of the system and can identify and scrutinize not only the major elements, but also the connections between them. This chapter explains in detail the rationale for the action research and hermeneutic approach taken in this study. A profile of the subjects interviewed and the quality controls used to ensure appropriate research rigour are also discussed.

#### 1.8.4. Chapter 4 – Learning outcomes

Chapter four presents the learning outcomes of the study. The research phenomenon was investigated within three contexts and as such, the outcomes are grouped into the following three distinct but integrated sections:

1. The impact of external and internal factors on organisational knowledge management sharing initiatives;
2. Impact of organisational and structural factors on Individual knowledge sharing; and
3. Organisational and individual readiness to share knowledge in a globalised environment.

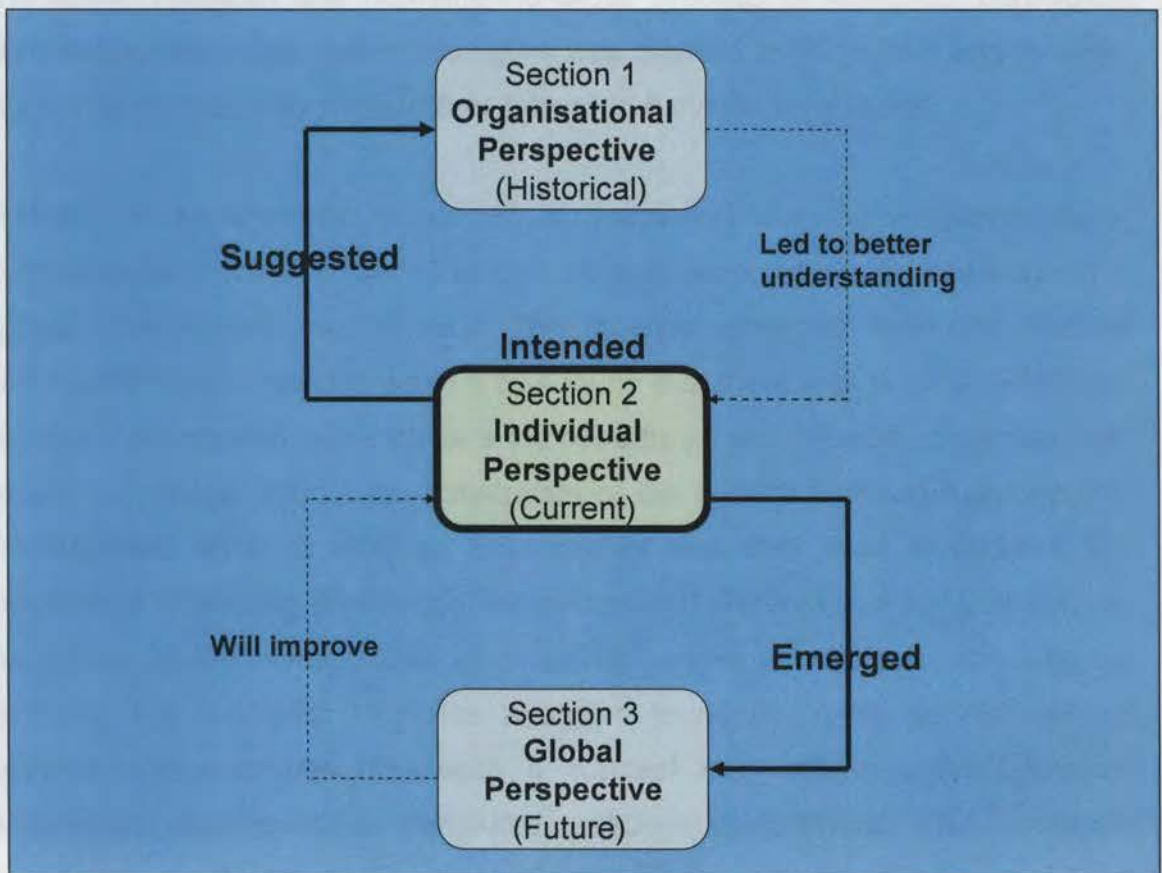


Figure 7 - Flow of categories of research investigation

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**Section one** explores the historical development of knowledge sharing strategies over the past ten years in the Western Australia Police. Using the socio-technical model developed by Pan and Scarbrough (1999) it examines how knowledge management initiatives have been implemented over the past ten years in the West Australia Police. It investigates how factors other than information systems have impacted the progression of knowledge management strategies with a specific emphasis on the relationship between government policies, police management orientations and knowledge creation and sharing.

**Section two** investigates the specific factors influencing knowledge sharing facilitators and inhibitors within the police agency as determined by individual staff members. Early in the research, 15 factors were loosely identified. Using the action research and hermeneutic cyclic process of reflection, participant discussion and collaboration this figure was distilled to 12 factors and through the same process they were further refined to 8 overarching factors.

**Section three** explores a conceptual framework for the development of communities of practice (CoPs) to assist police agencies share knowledge in a global investigative environment. This section emerged from the factors uncovered by my research when it was found that there was need to develop a system that provided police officers the opportunity and freedom to discuss and share knowledge without the constraints of the current command and control management style. In addition, this concept was also used to address the constraints of sharing knowledge across national and international jurisdictions especially in the investigation of globalised crime. Accordingly, this section explores the readiness of police agencies to adopt online communities of practice and examines how such a concept may influence the future of knowledge sharing in a distributed policing environment. This research proposes an initial framework that police agencies can use on which to reflect when first considering the implementation of a community of practice.

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### **1.8.5. Chapter 5 – Conclusion**

Chapter 5 discusses the research conclusions and presents implications in relation to theory and practice. This chapter integrates all elements of the thesis. The literature review is combined with the analysis to answer the research problem.

## **1.9. Definitions**

Definitions adopted by researchers are often not uniform (Perry, 1998b) and this is certainly the case with key terms in the knowledge management literature. In order to avoid confusion, key words used in this research are explained below. They have been explained in more detail in the next chapter. Less important terms will be described throughout the thesis as required.

Creating an accurate definition of knowledge, knowledge management and knowledge sharing is challenging (Bhatt, 2000). In the methodology section (Chapter 2) a thorough discussion of both concepts is provided. Based on this discussion the following operational definitions as espoused by Wiig (1995) have been selected

### **1.9.1. Knowledge**

*Knowledge consists of “truths, perspectives, judgements and methodologies that are available to handle specific situations. Knowledge is used to interpret information about a particular circumstance or case to handle a situation. Knowledge is about what the facts and information means in the context of the situation (p. 473).*

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### **1.9.2. Knowledge Management**

Wiig's (1995) definition has been selected as a suitable working definition

*"A conceptual framework, encompassing all activities and perspectives required to gaining an overview of, creating, dealing with, and benefiting from the corporation's knowledge assets and their particular role in support of the corporation's business and operations. KM pinpoints and prioritises those areas of knowledge that require management attention by identifying salient alternatives, suggesting methods for dealing with them and conducting activities to achieve the desired results (p.3).*

### **1.9.3. Knowledge sharing**

Knowledge sharing will be taken to mean both the active process of communicating and consulting with others to transfer knowledge. It includes the transferring of knowledge through social engagements or deliberately engaging with others to learn what they know.

### **1.9.4. Information**

The term 'information' relates to data that has been given context but not yet subjected to a cognitive process. It is based on the concept that information is data that makes a difference (Davenport & Prusak, 1998) or data that is endowed with relevance and purpose (Drucker, 1988). The information referred to in this thesis is collected and developed within the crime management environment. The main sources of such data are usually the product of contacts police officers have with both law and non-law abiding members of the public.

## **1.10. Limitations**

This study relies on attitudinal perceptions and, as such, may be open to criticism for lacking rigour from researchers grounded in a more scientific approach. Nevertheless, it has been well substantiated that perceptions drive

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behaviours (M. M. Brown & Brudney, 2003). Therefore, it is important to get a deep understanding of these perceptions. In addition, in line with the action practitioner method, only one police agency has been researched in detail, the results therefore may be best generalised by readers in the context of their own situation and environment.

Reason (2004) maintains that while it is difficult to make large scale generalisations and changes on the basis of one case, it is also difficult to build truly effective and liberating networks of inquiry without developing significant capacities for critical inquiry in the individuals and small communities which constitute them. His argument is pertinent when it is considered that every organisation is unique and that an understanding of organisational practices must be considered within the uniqueness of each organisation.

### **1.11. Conclusion**

This chapter has established the foundation for the research. It commenced by presenting a background to the thesis and the author. The research problem was also defined and the research methodology was presented. It confirmed that the field of knowledge sharing is a significant area of research especially within a policing environment. In any research, it is crucial to select the appropriate methodology. In this research it has been determined that action research incorporating case study method coupled with a hermeneutic enquiry incorporating a self reflective writing style, is well suited to explore this phenomenon.

Chapter two will present a detailed review of the literature which exists in relation to knowledge sharing and policing.



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## 2. Chapter - Literature Review

In the previous chapter, I gave a brief overview of this thesis and introduced the research phenomenon and the rationale for my research question.

What lessons can be learned from examining the literature and what are the gaps in the literature?

## Chapter 2 – Literature Review

Within the Australian Police?

In this chapter, I extend this introduction by exploring the literature pertaining to my research question. This literature review is explored through the lens of

knowledge.

If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas.

(George Bernard Shaw)

While there is no single or direct method to writing a literature review (University of New South Wales, 2005), the rationale underlying literature reviews is to provide a summary of research that has been conducted in a particular field of study and to demonstrate the researcher's proficiency ability to identify, analyse and synthesise information from the literature. Another important aspect is to ensure that the review is relevant to the research question and to the current state of knowledge in the field of study (University, 2002).

It has been posited that qualitative research methods, specifically action research, can begin by being less predetermined than research whereby the theory is developed in conjunction with or after the findings. I agree with this approach in that I recognise the need for creativity and discovery of new insights

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## 2. Chapter - Literature Review

In the previous chapter, I gave a broad overview of this thesis and introduced the research phenomenon and the rationale for my research question;

*What lessons can be learned from examining the facilitators and inhibitors to knowledge sharing in intelligence-led crime management within the Western Australian Police?*

In this chapter, I extend that introduction by exploring the literature pertaining to my research question. This literature review is explored through the lens of knowledge management theory and its relationship with knowledge sharing in the policing profession. As mentioned in Chapter 1, this is essentially a static literature review approach to develop the conceptual space for my research. However, the literature also co-evolved with my analysis and interpretation of the data in accordance with the action research approach (1997; McNiff et al., 2003). Consequently, the literature is referred to throughout this thesis.

### 2.1. *Introduction*

While there is no single or correct method to writing a literature review (University of New South Wales, 2005), the rationale underpinning literature reviews is to examine previous research that has been conducted in a particular field of study and to demonstrate the researcher's scholarly ability to identify analyse and synthesis information from the literature. Another important aspect is to outline existing knowledge in order to position the research within the context of a particular field of study (Shrensky, 2002).

It has been posited that qualitative research methods, specifically action research, can begin by being free from predetermined theories whereby the theory is developed in conjunction with or after the findings. I agree with this approach in that it facilitates enhanced creativity and discovery of new insights

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(Dick, 1997; Jacob, 1988). However, as I stated in my introduction and will explain in more detail in the next chapter, action research was not my intended approach for this thesis. Instead, it became an unintended but necessary outcome.

Before my convergence with action research, I was drawn to Eisenhardt's (1989, p. 536) argument that 'a priori' specification of constructs can help shape the design of theory-building research and build upon that previous knowledge. Even after my encounter with action research, I felt I still needed to conduct a sufficient literature search so that I could develop a framework to assist and guide me during the research process. At the same time however, I felt that there were times when I needed to present more specialised literature outside of this chapter. The action research philosophy gave me the courage to adopt a new approach and to integrate this literature into my thesis whenever it became relevant. In effect, the process shifted from a standalone review to an integrated co-evolution of literature and data analysis – see for example Chapter 4 sections 1 and 3.

The first part of this chapter explores my thesis' immediate theoretical discipline which is Knowledge Management and its acceptance within the business environment. After this, I present an examination of policing by investigating the historical and current environment of policing including its investment in technologies to assist in the collection of information and creation of knowledge management.

## **2.2. *Knowledge Management in the business environment***

### **2.2.1. Knowledge and competitive advantage**

It is argued that organisations who actively exploit knowledge in an attempt to create innovative outputs, do a much better job of delivering customer satisfaction (Hoopes & Postrel, 1999), than those who copy and ride on the "coat-tails of knowledge created by others" (Boisot, 1998 p. 42). This argument

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is supported by a number of researches who maintain that employees who are willing to share knowledge and experiences have become a valuable company resource (Davenport & Prusak, 1988; Malhotra, 2002; Martinez, 1998; Wiig, 1994). Furthermore, globalisation and the associated hyper-competition are driving changes in the working environment which has also amplified the need to create, share and manage knowledge (de Laat, 2001; Prusak, 2001).

Leading management theoreticians maintain that it is more profitable for a company to invest a given sum in its knowledge assets than to spend the same amount on material assets" (Probst, Raub, & Romhardt, 2000, p. 3). These assertions, coupled with increasing competitive pressures, are forcing organisations to marshal the knowledge of their most knowledgeable and motivated people to develop cheaper products. This is achieved by driving out costs from production processes, improving production times and quality to stay ahead of their competitors.

In striving for enhanced competitive advantage, companies increasingly invest in technology systems that collect and store information about the environment in which they operate. Many organisations have invested in information and communication technology and information systems to manage the mounting volume of organisational information in an effort to glean insights that can be leveraged for a competitive edge (Cody et al., 2002). They are also investing in so called knowledge management systems which support the collaboration of workers in the use of non-structured information (such as documents, e-mails and multi-media files) within non-routine, knowledge intensive tasks.

This technology investment drive has led to the fields of information management and knowledge management becoming the subject of intense interest by many business organisations (Wastell, 2001). For example, Australian companies including Accenture Australia, Wyeth Australia, Kimberly-Clark Australia and Corporate Express and international companies such as BP Amoco, Shell, Buckman Laboratories, Dow Chemical, Skandia, Unilever and Xerox are now adopting a knowledge perspective to improve their competitiveness (Earl, 2001; Hall, 2003; Prusak, 2001; Zack, 1999b).

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While the concept of competitive advantage is generally understood when discussing private industries, competitive advantage in policing can cause confusion, especially since police organisations are essentially natural monopolies and have few competitors. What I mean, when I refer to competitive advantage in policing, is the ability of the police to address future strategic challenges, particularly within the criminal investigation environment. In other words, an ability to perform to a standard that surpasses the increasing challenges of criminal activity.

### **2.2.2. Knowledge management and information technology**

Knowledge management research has been prolific over the past number of years. According to Pan & Leider (2003) early research inputs tended to concentrate on teasing out the difference between data, information, and knowledge. This was followed by research concentrating on the concept of tacit and explicit knowledge (Nonaka & Takeuchi, 1995) and the distinction between individual and collective knowledge (Spender, 1996). Other research has concentrated on strategies to leverage knowledge in an effort towards enhancing competitive advantage (Cody et al., 2002; R. Grant, 1996; Quintas, Lefrere, & Jones, 1997).

An analysis of the research indicates that there has been a large concentration on the capture and codification of information using information technology. This concentration, in effect, has been at the expense of the human aspects of knowledge sharing (Huber, 2001; Malhotra, 2002; Prusak, 2001) and has reduced organisations' ability to create and share tacit knowledge (Pawar et al., 2001; Wilson, 2002).

Researchers who have taken an interest in the human factor tend to posit repressive organisational and national culture as a dominant barrier to sharing knowledge and the use of technology as an enabler of knowledge sharing (Ford & Chan, 2003; Huysman & de Wit, 2000; McDermott & O' Dell, 2001; Pfeffer & Sutton, 2000; Tiwana, 2000). While culture can be argued as a barrier to knowledge sharing, the use of culture, as an explanation, is too wide and

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inclusive. Accordingly, the numerous structural and behavioural elements that contribute to specific organisational culture including structures, systems, values beliefs, myths and legends are complex factors, each needing to be researched and understood more clearly (McDermott & O' Dell, 2001; Yih-Tong Sun & Scott, 2005). As Reige (2005) maintains, formal and informal sharing networks already exist in most organisations, however the challenge for managers is to build on these networks. The first step in this approach is to clearly identify and understand the barriers and inhibitors specific to each organisation.

A number of explanations can be presented to explain why research has tended to concentrate on capturing information rather than the human aspect of sharing knowledge. One such explanation is that knowledge sharing is influenced by the relationship between the attitudes perceptions and behavioural traits of workers and not only is the transfer of individual knowledge particularly difficult to manage it is also difficult to research (Hislop, 2002; Senge, 1990). Another is the ambiguity that exists between information and knowledge. This ambiguity is fuelled partly by the numerous technology vendors who paint an exaggerated picture of their products as complete knowledge management solutions, when in effect, they are really information collection and managing tools (Broadbent, 1998; Duffy, 2000; Saint-Onge & Armstrong, 2004).

The research deficit into the human factors of knowledge sharing becomes more obvious when a literature search for knowledge sharing is confined to specific industries. For example, I conducted a search for knowledge sharing in policing using key police and knowledge sharing terms across the major university databases, including the Emerald Library and ProQuest's ABI inform and Academic Research Library. Using variations of key search words (police, knowledge, sharing and information technology), the best my search could accomplish was results relating to the use of information technology and its influence on policing practices. Apart from magazine and industry related articles, the empirical research publications were minimal. Considering the sharing of knowledge represents a valuable source of competitive advantage for police organisations (Luen, 2001), the research paucity was surprising.



The following table gives an overview of the outcome of my search:

**Table 1 - Police research into IT and KM**

Author	Context of research
Ackroyd (1993)	In this paper Ackroyd argues that an unreflective adoption and use of technology by the police, combined with inadequate management, have helped to cause decline in the relations between the police and the public in the UK
Ericson & Haggerty (1997)	In this book Richard Erickson and Kevin Haggerty, argue that police work is becoming increasingly involved in the transmission of information to institutions, such as insurance companies and health and welfare organizations. It is argued that data collection and transmission, has become the defining characteristic of contemporary police services.
Hoey (1998)	In this case study of the former Royal Ulster Constabulary (RUC) now the Police Service of Northern Ireland, Hoey explores the benefits of computerization for policing which she says are generally accepted as providing increased efficiency, both in administrative and operational terms, faster incident access, enhanced speed of dispatch, and the provision of archive information
Hoey & Topping (1998)	In this paper, Hoey and Topping argue that throughout Europe police need information in order to do their job and rely heavily on information from the public and information systems.
Rees (2000)	This paper is a major technology scan across Australasian policing. Rees examines the technological environment facing policing. He found that, technology, especially information technology, is advancing in leaps and bounds. In the next few years and during the foreseeable future, Australasian communities and the police will be affected, both positively and negatively, by rapid technological change.
Collier (2001)	This paper presents a case study of intellectual capital within a police service in the UK. Collier describes the acquisition and maintenance of intellectual capacity through five mechanisms and explores the ways in which the utilisation of intellectual capacity is reported. He concludes that intellectual capacity is essential for the police to prevent and detect crime, and to maintain public order, road safety and the confidence of the public
Dupont (2001)	Dupont maintains that the police is engaged in a race to embrace the new paradigm of the information age provide better services to the community. The paper is attempts to temper the IT centrism and enthusiasm of many police agencies and pleads for a more balanced approach to the introduction of information technologies in policing.
Chan, Brerton, Legosz & Doran (2001)	This study found that, while information technology may have enabled police to do some existing tasks better, it has not yet led to major changes in how the Queensland Police Service (QPS) deals with crime and disorder issues. It concludes that information technology has transformed the structural conditions of policing in some important ways, while leaving many cultural assumptions and traditional policing practices unchallenged.
Dupont (2003)	This paper presents an initial analysis of tapes containing confidential and non identifying interviews with ten active and retired Australian police commissioners. The paper discusses profiles of the commissioners and their careers, and issues covered in the interviews, including relations between police commissioners and governments, police associations and the media; changes in police leadership and management styles; and the management of police integrity, including views on external oversight bodies and the advantages of self regulation. The paper concludes that an ongoing oral history program would give the opportunity to every retiring commissioner to share experiences and reflections with peers, and would unlock, consolidate and extend the stock of organisational knowledge available to police leaders



Brown & Brundney (2003)	This research explores the feasibility, effectiveness, and limitations of information and technology in promoting the learning organization in the public sector. It is based on the premise that many police departments have shifted to a community problem-oriented policing philosophy rather than focusing on enforcement and incarceration. This philosophy is based on the dissemination of information through IT to promote a proactive, preventative approach to reduce crime and disorder
Collier, Edwards & Duncan (2004)	This paper describes the organisational processes of knowledge acquisition, sharing, retention and utilisation as it affected the internal and external communication of knowledge about performance in an English police force. Although technology investment was a preferred means of communicating knowledge about performance, without addressing cultural barriers, an investment in technology may not yield the appropriate changes in behaviour. Consequently, it found that technology needs to be integrated with working practices in order to reduce organisational reliance on informal methods of communication.

It can be seen, that apart from the work by Hoey (1998), Hoey & Topping (1998), Collier (2001) and Collier, Edwards & Duncan (2004), few inroads have been made into the phenomenon of knowledge sharing in policing. Even though most of the research papers have concentrated on the impacts of IT on policing, this area is still poorly researched. This lack of research caused Chan et al. (2001) to state that the "...literature shows that there has not been a great deal of research into the impact of information technology on police organisations" (p vii). An explanation for such paucity may be the difficulty researchers have in being accepted and accessing information within policing organisations. This point is also alluded to by Mead (2001), who also conducted action research in his policing environment when he stated that

"Despite my apparent success and high rank in the police service, I often feel quite marginal and am aware that, in my values and style, I can be quite threatening to my peers" (p. 19 Ch 2)

Accordingly, an important, but unintended finding from this literature review is that the field of information communication technology and its relationship with policing provides an opportunity for the advancement of knowledge within an important but relatively uncharted field. What is obvious from the review is that along with the scarcity of research covering IT and police the research relating to knowledge sharing and policing is practically non-existent.



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### 2.2.2.1. What is knowledge?

Knowledge can mean different things to different people and there is little value to be gained by trying to determine the best single definition for knowledge and knowledge management (Hall, 2003). At the same time, however, when considering the value of knowledge management, it is important to have a shared understanding of what is meant by knowledge.

A complete explanation is difficult to find as knowledge is a 'slippery' concept to capture (Earl, 2001; Spender, 2000) and points of view, ranging from the practical to the philosophical, have been posited to provide an explanation of knowledge. In fact, it has been said that the question of defining knowledge has been unsuccessfully debated by philosophers since the classical Greek era. For example, Denning (2000) maintains that the philosopher, Plato, in his dialogues, captured and elaborated the thinking of his mentor Socrates, which paved the way for successive generations to discover and share that thinking

Knowledge is expressed as both a means and an end - as a means it is information and as an end it is understandable and useable, (R. B. Brown & Woodland, 1999). On another level, knowledge is described as any process or practice of creating, acquiring, capturing, sharing and using knowledge to enhance learning and performance in organisations (Quintas, Lefrere, & Jones, 1997). Others explain it as a cognitive process triggered by the inflow of a stimulus (Alavi & Leidner, 2001) or as 'a fluid mix of framed experiences, values, contextual information and expert insight' (T.H. Davenport & Prusak, 1998, p. 5). Knowledge can also be viewed as the transformation from an 'unreflective' to a 'reflective' practice (Touskas & Vladimirov, 2001).

Although the terms knowledge and information tend to be used interchangeably, information is not knowledge (Malhotra, 2002; Sveiby 1997). This point was eloquently made by Johnson (2004, p.1) at the OECD World Forum on Key Indicators when referring to statistics and knowledge, he argued:

*"Statistics is information, but information is not knowledge...ideally statistics should be unassailable facts upon which knowledge is based...."*

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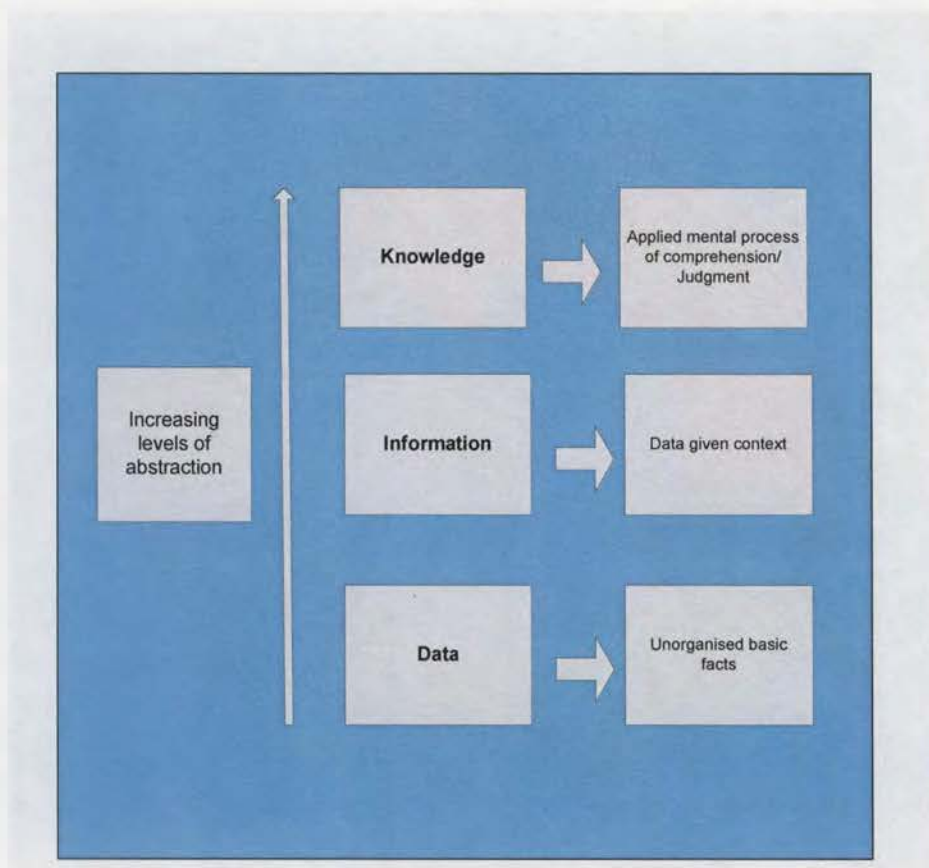
*Statistics represent the raw material for the creation of knowledge, just as steel represents the raw material for the manufacture of automobiles. But it is knowledge that takes steel and turns it into an automobile, and it is knowledge which takes the raw material of statistics and turns it into knowledge, and in a further stage into policy.”*

Within this context, knowledge can be explained as consisting of facts, truths, beliefs, perspectives, concepts, judgements, expectations methodologies and know-how, whereas information consists of facts and data that are organised to describe a particular situation or condition (Wiig, 1994). In other words, information presents a situation; knowledge on the other hand determines what that particular situation means.

In a similar vein, knowledge has been described as ‘know-how’ and ‘know why’ (Davenport, 1998; Gurteen, 1998; Skyrme, 1998). Taking this concept a stage further, Zack (1999b) argues that knowledge consists of several types;

- Declarative knowledge, which is about describing something;
- Procedural knowledge which is about how something occurs or is performed; and
- Causal knowledge which is about why something occurs.

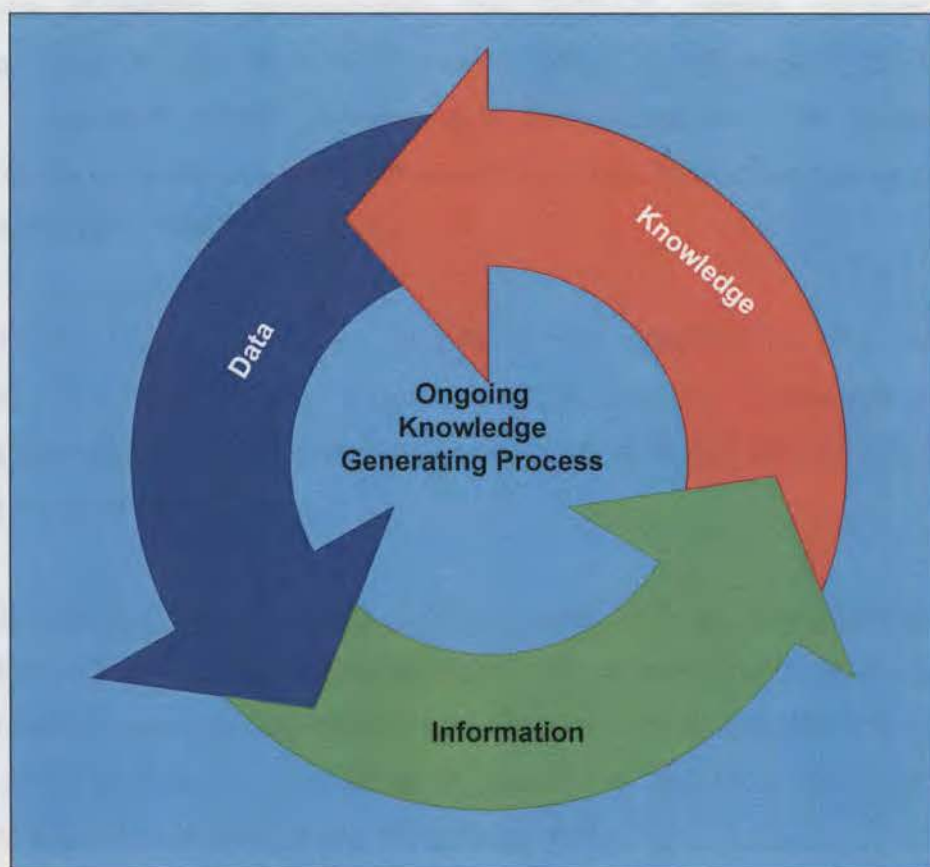
Gurteen’s (1998) example of baking a cake succinctly captures the essence of the difference between data information and knowledge. He maintains that an analysis of a cake’s molecular constituents is data, which for most purposes is not very useful as one may not even be able to tell it were a cake mixture. The list of the ingredients is information and most experienced cooks would probably know that the ingredients related to a cake. In other words, the data has been given context. The recipe is described as knowledge (explicit knowledge) as it explains how to make the cake. On the other hand, an inexperienced cook even with the recipe might not make a very good cake. A person, however, with relevant knowledge, experience, and skill (tacit knowledge) would almost certainly make a cake from the recipe. The following figure illustrates this concept



**Figure 8 - Data to knowledge progression –  
Developed for this Research**

However, the progression from data to knowledge does not always follow a true linear fashion and the three elements are very much interdependent. To sustain knowledge there must be rejuvenation and renewal of knowledge as it absorbs and adopts new data.

This rejuvenation process has been represented in Figure 9 below as a knowledge rejuvenation and renewal wheel by Jones (2001)



**Figure 9 - Knowledge Rejuvenation Process**

**Source Jones (2001)**

Even though no satisfactory definition of knowledge is obvious from the literature, it is clear that there is a strong interplay between technology, information and people (Kane, 2003). As such, knowledge creation and sharing are highly dependent upon the contributions of individuals and their participation in the process (Boisot, 1998; Iftikhar, 2003; Kautz & Thaysen, 2001). In order to foster knowledge creation and sharing using information technology, managers need to have an understanding of how information technology and people interface (Gardner & Ash, 2001). They must accept that the technical power needs to be used intelligently and deliberately (Igbaria, 1999) and that this technical power should not be used as a substitute for socialisation (Touskas & Vladimirov, 2001). As Ruggles (1998) succinctly stated after studying the barriers to knowledge management in 431 European organisations, "If technology solves your problem, yours was not a knowledge management problem" (p. 88). His findings endorse the importance of the human element when he says that "if we have learned nothing else... we have seen clearly the

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importance of getting approximately the 50/25/25 people, process, and technology balance right from the outset" (p. 88). The influence of the human factor is given even greater importance at Xerox Corp with Dan Holtshouse, Director of Corporate Business, estimating the human influence to be as high as 90 per cent (Wah, 1999).

Having regard to the alternative definitions and explanations of knowledge advanced in the literature, for the purpose of this research, I have selected the following operational definition as espoused by (Wiig, 1995) as one that fits the needs of my research:

*Knowledge consists of "truths, perspectives, judgements and methodologies that are available to handle specific situations. Knowledge is used to interpret information about a particular circumstance or case to handle a situation. Knowledge is about what the facts and information means in the context of the situation (p. 473).*

I made this selection on the basis that it recognises the importance of the human context in that knowledge is a body of information resident within an individual organised by truths, judgement, experience and rules within the context of many situations.

#### **2.2.2.2. What is knowledge management?**

If the concept of knowledge is difficult to explain, an explanation of knowledge management can be even more difficult (Wah, 1999). Knowledge management has been described by Broadbent (1998) as a form a expertise-centred management that draws out people's tacit knowledge, making it accessible for specific purposes to improve the performance of organisations. However, as with knowledge, an agreed definition of knowledge management has also eluded scholars and practitioners alike since the term first entered the management vernacular. Virtually every paper penned on the subject includes a reworked definition, and the debate will continue.

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When examining knowledge management definitions, Dilnutt (1999) found a number of common core elements within these definitions, these were:

- Acquisition of knowledge;
- Codification and storage of knowledge;
- Knowledge accessibility; and
- Transfer of the knowledge.

What is interesting from his findings, is that the term 'knowledge transfer' is used in favour of knowledge sharing. Dilnutt argues that the use of this term further highlights an information technology emphasis on knowledge management. He maintains that 'knowledge transfer' indicates a mechanistic related process, whereas 'knowledge sharing' indicates a human related process.

It can be seen that there is a quagmire of issues surrounding the development of a definition of knowledge management. A major frustration is trying to devise an all encompassing definition that attempts to explain and resolve the numerous divergent issues and paradigms. Outside of the academic area and in terms of organisations, it is probably best if the efforts are focussed more on who has knowledge, when they get it, how they get it and what they do with it for the good of the organisation. With this in mind, it becomes apparent that knowledge management is not a stand alone organisational procedure or a policy (Hall, 2003). It is a holistic attitude that demands total organisational commitment and cooperation to succeed (Burden, 2000).

These elements are succinctly captured again by Wiig (1995). For that reason, I have selected his definition of knowledge management for my thesis:

*"A conceptual framework, encompassing all activities and perspectives required to gaining an overview of, creating, dealing with, and benefiting from the corporation's knowledge assets and their particular role in support of the corporation's business and operations. KM pinpoints and prioritises those areas of knowledge that require management attention*

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*by identifying salient alternatives, suggesting methods for dealing with them and conducting activities to achieve the desired results (p.3).*

### **2.2.2.3. What is knowledge sharing?**

Knowledge sharing can be viewed as a one way asymmetrical process where one person shares and another receives knowledge. However, it actually involves an active and a passive two-way symmetrical process (Van Den Hooff & De Leeuw Van Weenen, 2004). This two-way process includes knowledge donating which is simply communicating knowledge with others and knowledge collecting which involves encouraging colleagues to share knowledge. McDermott (1999c) explains it as the process of guiding others through their thinking or providing insights to help others understand their own situation more clearly.

For the purpose of this thesis, knowledge sharing will be taken to mean both the active process of communicating and consulting with others to transfer knowledge. It includes the transferring of knowledge through social engagements or deliberately engaging with others to learn what they know.

### **2.2.3. Factors influencing knowledge sharing**

It can be seen that knowledge management involves processes of sharing and learning. Furthermore, knowledge itself has a number of properties and characteristics that facilitate and inhibit knowledge sharing. The purpose of this research is to uncover the factors that inhibit or facilitate knowledge sharing activities.

Some studies relating to knowledge sharing indicate that employees tend not to share their knowledge, especially if that knowledge influences their status and power (Ciborra & Patriota, 1998). Even when organisations make a concerted effort to implement knowledge management strategies to facilitate sharing, the knowledge does not always flow easily (Szulanski, 1996). However, a more recent study of staff employed within an international oil company found that employees were willing to share information if that information was for the

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common good of the organisation (Fraser, Marcella, & Middleton, 2000). Nonetheless, the authors stress that the results are specific to the oil industry and “should be viewed in the light of an awareness of the specific nature of the study” (p 51).

Over the past number of years, researchers have endeavoured to understand the factors that inhibit or facilitate knowledge sharing in organisations. Many of these are high level factors that are common to many organisations. For example, Standards Australia cited in Hall (2003) identified a list of potential cultural barriers including:

- Dismissal of the value of innovations not developed in-house;
- Rigid adherence to ‘one way of doing things’;
- Management resistance to the sharing of information;
- Resistance to change;
- Autocratic leadership;
- Change fatigue; and
- Technology dominates the knowledge management process.

More recently, Reige (2005) presented ‘three dozen’ potential knowledge sharing barriers within Individual, organisational and technical domains. What is obvious from each of the lists is that the contents are described as potential barriers that may or may not be barriers within all organisations. In other words, in order to establish the barriers for specific organisations, managers need to drill down to find the barriers relevant to their organisations.

The following table, based on my literature review, provided the starting point for the investigation of my research problem and later drilling into my organisation. It provided me with a framework for conducting rigorous examination of the issues identified in this review. It also proved very useful when developing questions for the focus groups. I also used it as a tool to assist my informal face-to face and ad-hoc discussions (McNiff et al., 2003). The format of the questions is presented in Chapter 3.



**Table 2 - Factors influencing knowledge sharing within organisations**  
**Developed for this research**

<b>Factors</b>	<b>Context</b>	<b>Author/s</b>
Involvement in discovery	Employees more inclined to share knowledge when they are involved in solving organisational problems	(Leonard-Barton, 1998) (Nonaka & Takeuchi, 1995) (Constant, Kiesler, & Sproull, 1994)
Rejection	Potential contributors fear that their input is not important enough or will be rejected	(Pawar et al., 2001) (Ardichvili, Vaughan, & Wentling, 2003) (Argyris, 1993)
Culture and Leadership	Culture and Leadership style is important. There must be culture that encourages sharing. This is sustained by good leadership style. However, it is also agreed that overcoming barriers to Knowledge sharing has more to do with how the strategies are implemented rather than the organisational culture.	(Pan & Scarbrough, 1998) (McDermott & O' Dell, 2001) (Pan & Leidner, 2003) (Tiwana, 2000) (Pfeffer & Sutton, 2000) (MacNeil, 2003)
Time	Lack of time provided within organisations to share impacts on the capability of people to share	(Pawar et al., 2001) (O' Dell & Grayson, 1998) (R. M. Grant, 1996)
Trust and collaboration	This can work two ways a low trust of others (perceived or otherwise) will reduce knowledge sharing. However, environments of high trust can increase the sharing capacity.	(Pawar et al., 2001) (Politis, 2001) (Sankaran, James, Kouzmin, & Hase, 2004)
Power	Sharing of knowledge can lead to a loss of power.	(Hanson, 1999) (Mintzberg, 1998) (Scarborough, Swan, & Preston, 1999)
Rewards	Lack of incentives and rewards may inhibit knowledge sharing. Sharing process must become natural and use of rewards may stifle this objective. Rewards also related to power.	(Standing & Benson, 2000) (McDermott & O' Dell, 2001) (Finerty, 1997)
Technology centric	Knowledge cannot be separated from the knower. Therefore, knowledge management strategies must focus on engaging the individual. There is scepticism towards strategies that relate IT to knowledge management. As the tendency is for IT to be seen as a leading rather than facilitating KM initiatives	(Fernie et al., 2003) (Hall, 2003) (Malhotra, 2002)
Hierarchical bureaucracy	Effective knowledge sharing is inhibited by rigid and bureaucratic hierarchical structures	(Davenport & Prusak, 1998) (Wiig, 1995) (Hall, 2003)

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While these factors have been presented primarily, within the literature, as inhibitors, they can also be leveraged as facilitators depending on which end of the continuum they fall. For example, if low trust is deemed to be an inhibitor, it should stand that high trust will act as a facilitator and similarly if lack of incentives is deemed to inhibit sharing then the introduction of rewards and incentives should have the opposite effect. However, this may be too simplistic an approach. The management literature has many examples of general reward strategies not having the desired results (Bartol, Martin, Tein, & Matthews, 1995; Mullins, 1996) .

#### **2.2.4. Knowledge Management - Fad or robust management model?**

There is debate as to whether knowledge management, as a concept, is a valid management model or just another fad, and whether it is robust enough to warrant research. According to Broadbent (1998) the concept of knowledge management, as a management philosophy, is not new, it has been practiced by many successful organisations for many years and has become a robust managerial concept in its own right .

While the philosophy of knowledge management may not be new, the term has only been given relatively recent acceptance in business and academic journals. For example, Wilson (2002) searched all three citation indexes of the *Web of Science* data base between 1981 and 2002 for papers with the term knowledge management in the title. He found that the term did not occur until 1986 with occurrences found in two journals albeit in the editorials. It was not until 1997 that the term knowledge management began to gain any significance where the emphasis was on information technology as a knowledge management tool. During this period, knowledge management “meant some application or other of computers, with the influence stemming from the notion of knowledge bases in the expert systems field” (Wilson, 2002, p. 6). This technology focus continued up to 2001, where the *Web of Science* data base returned 158 references of which 66 related to technology with information sharing, communities of practice and knowledge sharing occurring only ten

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times. While Wilson does not disclose to what the other 82 articles referred, the technology focus emphasis is obvious.

Ruggles (1998) conducted a similar search and found that the term knowledge management has been used to encapsulate everything from organisational learning to database management tools. While he does not state what research indexes he used to conduct this search, he did not confine his search to academic journals and included books and other articles. Allowing for his inclusion of non academic literature, the findings are relatively similar to Wilson's (2002) returning a result of 20 articles in 1986 increasing to 160 in 1996. Despres and Chauvel (2000) maintain that the number of new knowledge management articles registered in ABI/INFORM has doubled each year over the past decade.

Ponzi & Koenig (2002) provide empirical evidence that management movements generally reveal themselves as fads or fashions within approximately five years after having gained some type of acceptance and momentum. When they applied this heuristic to the concept of knowledge management, they found that knowledge management has outlived the 'fad-period' and is establishing itself as a new aspect of management. The figures below illustrate the findings for three well known management trends - Quality Circles, Total Quality Management and Business Process Reengineering compared with Knowledge Management.

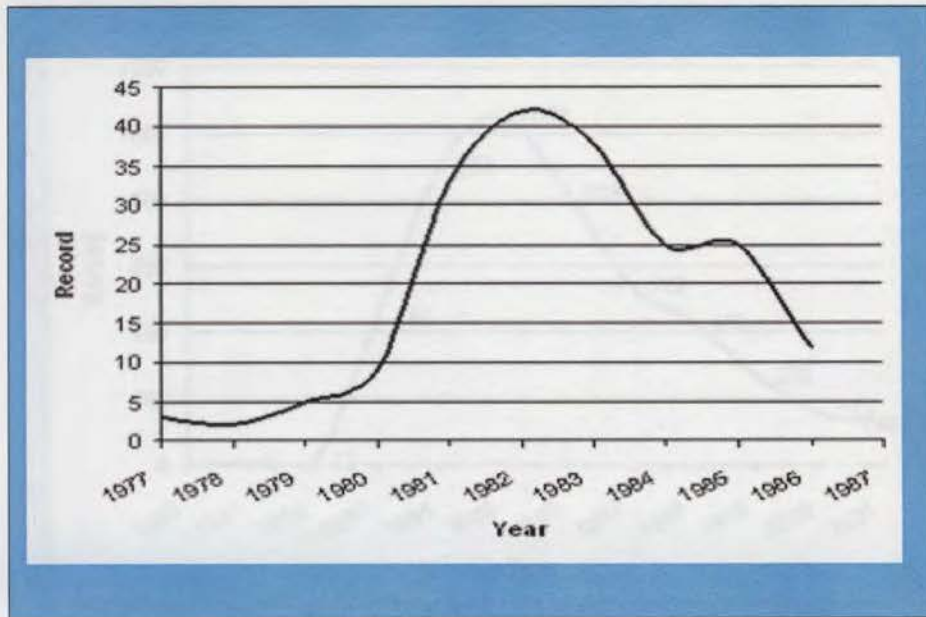


Figure 10 - The lifecycle of quality circles, 1977-1986

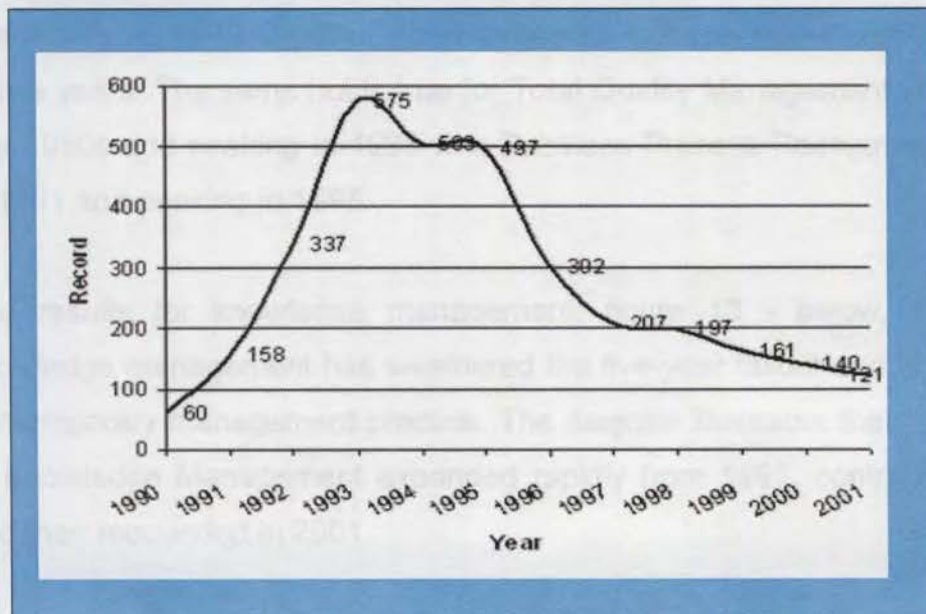
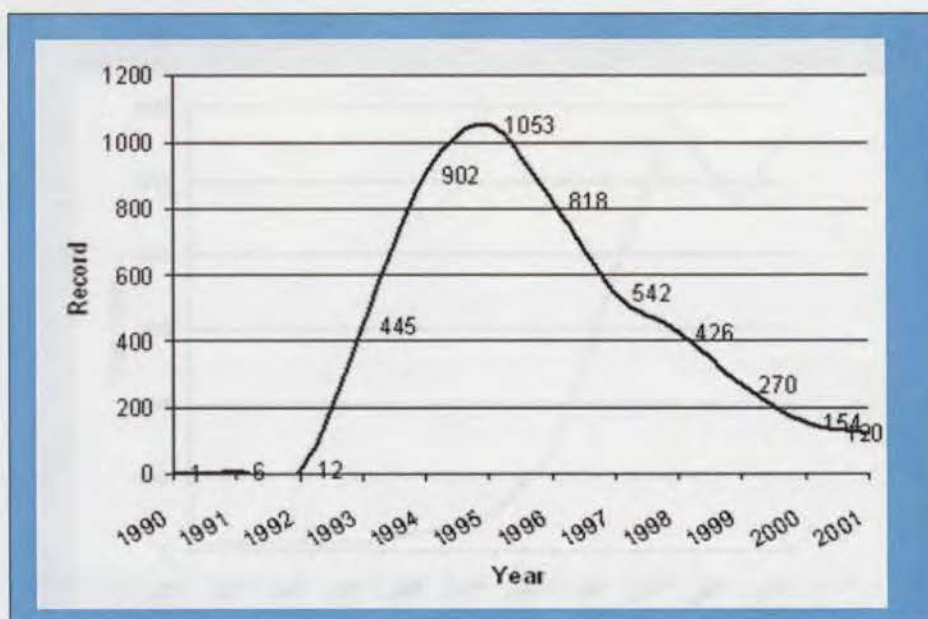


Figure 11 - The lifecycle of Total Quality Management, 1990-2001

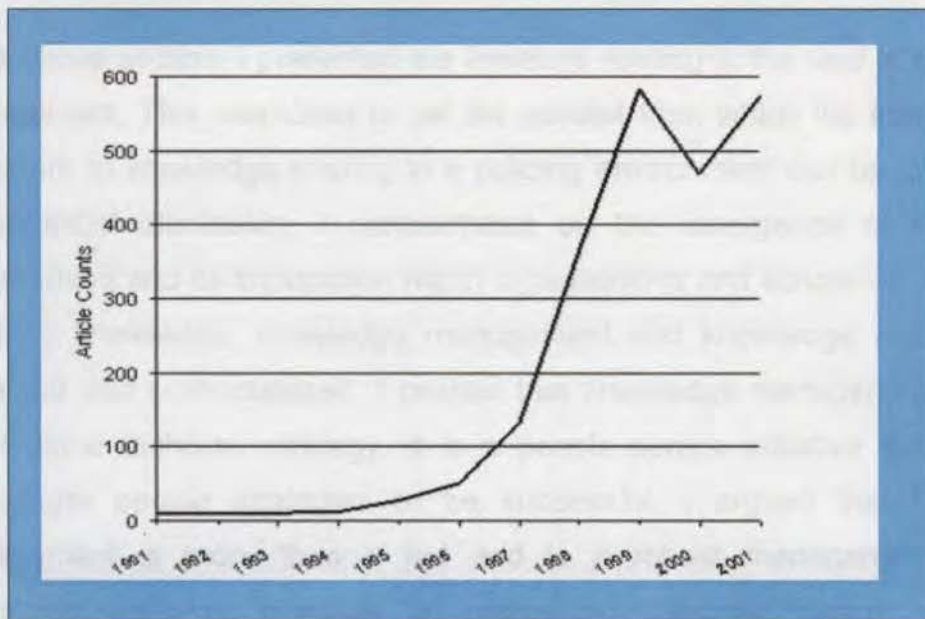




**Figure 12 - Life cycle of Business Process Reengineering, 1990-2001**

When comparing these graphs, it can be seen that after the initial momentum started each management fashion peaked from four to six years. More specifically, in 1979 Quality Circles appeared to have momentum only to peak in five years. The same holds true for Total Quality Management starting in the late 1980s and peaking in 1993 with Business Process Reengineering starting in 1991 and peaking in 1995.

The results for knowledge management, figure 13 - below, suggest that knowledge management has weathered the five-year fallout and is becoming a contemporary management practice. The diagram illustrates that the popularity of Knowledge Management expanded rapidly from 1997, contracted in 2000, and then rebounded in 2001.



**Figure 13 - Life cycle of Knowledge Management**

One reason knowledge management has remained an important part of the management 'tool box' is that knowledge itself is regarded as a critical organisational resource and the foundation of sustainable competitive advantage (Davenport & Prusak, 1998; Pan & Scarbrough, 1999; T. Stewart, 1997). It is argued that this relationship was first raised by Drucker (1988), who suggested that "knowledge workers" and the knowledge they represent are significant to a company's competitive success. It was also argued that without knowledge, few organisation can make effective use of its materials, processes and financial capital to produce goods or services (Davenport & Prusak, 1988).

These assertions were based on a noticeable shift from the agricultural and manufacturing industries to service industries and more recently to human social networking and value adding services (Drucker, 1993; Savage, 1990). The outcome of this shift is that many organisations now view knowledge as a key asset contributing to organisation effectiveness (Quinn, 1992)

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### **2.2.5. Summary**

In the above section, I presented the literature relating to the field of knowledge management. This was done to set the context from which the inhibitors and facilitators to knowledge sharing in a policing environment can be understood. In the initial discussion, I concentrated on the emergence of knowledge management and its importance within organisations and academia. Key terms including knowledge, knowledge management and knowledge sharing were explained and contextualised. I posited that knowledge management is not a stand alone technical strategy; it is a people centric initiative that requires appropriate people strategies to be successful. I argued that knowledge management is more than a fad and is a robust management concept warranting research. However, to understand fully the factors (individual, organisational and technical) that influence knowledge sharing in particular organisations, researchers must be prepared to become part of the solution by immersing themselves in the research.

In the following section, I explore the discipline of policing within the context of this knowledge management discussion.

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## **2.3.      *Policing and knowledge management***

This section begins with an overview of the history of policing and its evolution in Western Australia. This overview sets the context in which my research has been conducted. The need for such contextualisation is supported by Klein and Myers (1999) who argue that such an approach allows both the researcher and reader to engage in critical reflection of the social and historical background of the research setting.

### **2.3.1. Introduction – History of policing in Western Australia**

The history of policing stretches back 5000 years, but probably the most significant date in the history of western society policing was 1829. This was the year that Sir Robert Peel founded the London Metropolitan Police Force (Edwards, 1999). Coincidentally this was also the year that the first British colony was established in Western Australia. Since then, policing has witnessed many social, structural and economical and political changes, but the underlying principles as espoused by Peel in 1829 have not changed (Enders, 2001).

#### **2.3.1.1.    Structure and authority**

A study of Peel's nine principles indicates that his overarching philosophy was to ensure that the police exist to prevent crime and disorder through a relationship with the public. This approach was based on the premise that the police are the public and the public are the police (New Westminster Police, 2003). The most enduring and influential innovation introduced by Peel was the establishment of regular patrol areas, known as "beats." Peel assigned his officers to specific geographic zones and held them responsible for preventing and detecting crime within the boundaries of these zones. To implement the beat concept, Peel introduced the paramilitary command structure, which has become a managerial institution in all Australian police services (Etter, 1993).



The fact that this paramilitary structure has become synonymous with policing world-wide and has persevered for so long is quite amazing. The concept was initially introduced by Peel because he believed a military-type discipline rather than civilian managerial disciplines would ensure constables actually walked their beats, liaised with the community, and if need be, enforced the law (Patterson, 1995). The perseverance of this style of management may account, in part, for the findings of a recent study of the impact of information technology on policing practices in the Queensland Police Service. In this study it was found that while information technology had transformed some of the structural and organisational conditions of the service, many cultural assumptions and traditional policing practices remained unchallenged (Chan et al., 2001).

### 2.3.1.2. Technical innovations

Over the past 50 years policing has embraced many technological innovations, including mobility, identification and information processing technologies, shifting from a labour intensive to a capital intensive profession with employees reshaped as knowledge brokers (Dupont, 2001; Ericson & Haggerty, 1997). More recently, there has been a move towards virtual organising technologies (Hughes & Love, 2004) . The following diagram gives an overview of the technologies introduced into policing over that 50 year period

**Table 3 - Technologies introduced into policing over the past 50 years**  
 Modified for this research from Nagola (1995)

Mobility Technologies	Identification technologies	Information processing and knowledge enabling technologies	Virtual technologies
<ul style="list-style-type: none"> <li>• Motor Cars</li> <li>• Motor Bikes</li> <li>• Helicopters</li> <li>• Planes</li> </ul>	<ul style="list-style-type: none"> <li>• Police artists</li> <li>• Photographic images</li> <li>• Automated fingerprinting</li> <li>• Biometrics</li> <li>• DNA</li> <li>• Image Recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Manual and electronic typewriters</li> <li>• Networked computers</li> <li>• Databases and data mining</li> <li>• Expert and intelligence support Systems (Business intelligence)</li> </ul>	Internet and intranet technologies Video conferencing B2B facilities



Communication Technologies	Surveillance and detection technologies	Organisation and administrative technologies
<ul style="list-style-type: none"> <li>• Telephone systems</li> <li>• Telex machines</li> <li>• Facsimiles</li> <li>• Computer Aided Dispatch Systems (CAD)</li> </ul>	<ul style="list-style-type: none"> <li>• CCTV</li> <li>• Sensors and detectors</li> <li>• Phone tapping technologies</li> <li>• Satellite scanning</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprise resource planning systems (ERP)</li> <li>• Document management</li> </ul>

It is difficult to pin-point the exact time-period relative to each adoption as many of the technologies are enhancements and improvements of previous investigative tools and have evolved as part of policing development. It is possible, however, to put some time-lines on the seminal technologies. For example, mobility technologies were introduced in the early 1900s with communication technologies being introduced in the late 1950s and early 1960s. Information processing and knowledge enabling technologies began to emerge around the early 1990s. Identification technologies have always been evident with police artist and the introduction of the camera and then fingerprinting. More contemporary identification technologies include deoxyribonucleic acid (DNA) and biometrics. Virtual technologies are now becoming more widespread with the introduction of the internet and video conferencing.

#### **2.3.1.3. Current policing environment**

During the past decade, change has become a permanent feature of the public sector landscape (Coventry & Nutley, 2001). Worldwide industrial and economic transformations have led to significant upheavals for many organisations (Wiig, 1994). To stay relevant, organisations are continually rethinking the way they conduct their business and the way they add value to their customers, shareholders, employees and society. Policing, in particular, has not escaped the impacts of these changes, with the past ten years witnessing political moves towards the embracement of managerialism or commonly referred to as 'new public management' (NPM).

#### **2.3.1.4. New Public Management**

The NPM philosophy advocates the substitution of public sector management practices with private sector business philosophies (Leishman, Cope, & Starie, 1996). The change towards NPM has been marked, on the one hand, by

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increased policing costs and on the other with decreasing budgets (P M Collier et al., 2004). In addition, police managers have been faced with a decline in political support for increased public spending, which has led to declining human resources and ultimately reduced police services - see for example (Kennedy, 2003, p. 68). While there are many political proponents of the NPM philosophy, many researchers believe that the preoccupation in most public sector organisations is to achieve one political objective – cost cutting (Avis, 1996; Brunetto & Farr-Wharton, 2003; Harrow, 2002)..

NPM has become the dominant paradigm in the Australian public sector (Carroll & Steane, 2002) and is destined to remain that way for the foreseeable future (Murphy, 2002). In essence public sector organisations, including police agencies will now have to operate smarter or as Wiig (1994) maintains 'act intelligently with better knowledge' (p. 4).

This 'operate-smarter' philosophy was the catch cry of the Western Australia Police executive during its 'Delta' change program, which was established in 1994. This change initiative was responsible for one of the greatest change reform initiatives within Western Australia policing for the past two decades (Bogan & Hicks, 2002). In order to meet the NPM challenges, and embrace the work smarter values, the Western Australia Police made significant investment in information and communication technologies. Comparable investments were also made by other public sector agencies that were also beginning to realise the importance of information communications technologies to its policy-making and service delivery models.

Today, many government departments are putting knowledge management strategies high on their strategic agenda (Organisation for Economic Co-operation and Development, 2003) . While this may be so, the existing literature suggests that public sector is falling behind in knowledge management practices (Cong & Pandya, 2003). It is argued that because of the required holistic organisational approach, knowledge management is not as easy, as it seems, to implement (Burden, 2000). Moreover, the benefits to be reaped from knowledge management will not be handed to government agencies on a plate,

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nor will the challenges be met without some corporate adjustment (Cong & Pandya, 2003).

Similar technology investments in the private sector have resulted in significant changes in management styles, including the way they conduct their business and their overall approach to competitiveness (Bai & Lee, 2003). Similarly, police managers need to change their management style and focus on understanding the relationships between technology investments and knowledge management practices. The need for this shift in management style is all the more important when it is considered that police support services have been investing heavily in technology to assist the 'fight against crime' (Chan et al., 2001; Dupont, 2001), but that the acquisitions have not been matched by decreases in crime rates.

**2.3.2. The influence of technology investments on knowledge sharing**

In addition to increased technological advances, police agencies worldwide are now embracing leading edge information and communication technologies. This interest is largely concentrated on information communication and information management technology. The investment is based on two overarching factors. The first is that information gathering is the 'stock-in-trade' of policing (Chan et al., 2001, p. 3), therefore, the very nature of police work necessitates officers needing access to timely, accurate and up-to-date information. Secondly, "the amount of information police officers come into contact with in the course of their work is astounding" (Luen, 2001 p.312) requiring them to effectively manage that knowledge to discharge their duties (P M Collier et al., 2004).

The following table gives an overview of the driving forces which influence the adopting of IT within a policing environment. It can be seen that the management of, access to and analysis of information has a strong information technology influence.



**Table 4 – External forces influencing ICT adoption within policing**

Originally developed for this research and later published in (Hughes & Love, 2004).

Driving Forces External – Community Expectations	Arrangements	Benefits	Disadvantages/ Constraints
Increased police visibility and patrols	Mobile data input and retrieval via internet/satellite	Ability to access information external to police stations. Allows officers to conduct administrative business on the road and remain visible to the public.	Security of data problems – lap tops in cars can reduce interior space. Bandwidth may not be sufficient to allow download of large blocks of data such as pictures. Potential for satellite black spots.
	Software Overlay demographic data Using Social network analysis software to discover Social Networks and Communities of Practice and appropriate policing requirements	Linking police stations to current and projected demand patterns, along with an analysis of how best to provide policing services through the latest technologies and techniques will place police services in a better position to effectively respond to crime and related issues, while enhancing the community's sense of safety and well-being.	Political and public resistance if communications relating to station closures are not articulated correctly.
Detect and Investigate crime	Intelligence analysis systems - GPS	Effective use of intelligence for improved intelligence processes	Few officers with skills necessary to leverage full potential of systems
	Face recognition systems (Biometrics technology)	Used to identify individuals involved in crime	Mistakes can be costly – civil claims
Promote public safety and security	CCTV	Crimes recorded and used in evidence	Crime displacement potential – richer areas may benefit with access to investment.

**Table 5 - Internal forces influencing ICT adoption within policing**

Originally developed for this research and later published in (Hughes & Love, 2004).

Internal Driving Forces Resources & Assets	Arrangements	Benefits	Disadvantages/Constr aints
Effective human resource and asset allocation	Internet offers many opportunities for police managers to deliver non-emergency and information services electronically through police portals. Investigations can be conducted virtually across jurisdictions	Provision of greater access to services, allow for on-line reporting and inter agency virtual alliances – free up officers for patrolling	Isolate some members of the community with no internet access. Virtual alliances require an investment in information communication technologies and changes in agency cultures and skills.

**Table 6 - Government Influences on IT**

Originally developed for this research and later published in (Hughes & Love, 2004)

Driving Forces Government	Arrangements	Benefits	Disadvantages/Constr aints
Provision of effective business processes. New Public management	Development of strategic information management systems	Provision of whole-of- agency management and operational information. KPIs and other efficiency reporting measurements.	May not be seen as core policing functions and users may not use or by-pass - system resulting in data validation and integrity problems

### **2.3.2.1. Police processes and Information collection**

Information, in a policing context, covers a wide range of diverse organisational activities including crime and traffic management, budget and asset control, human resource deployment, record management and statistical analysis (Western Australia Police, 1998). For the purpose of this thesis, the term 'information' relates mainly to information collected and developed within the crime management environment. The main sources of such data are usually the product of contacts police officers have with both law and non-law abiding citizens. Other data collection sources include personal and electronic observations, telephone and email intercepts, registered informants and data accessed via public and private organisations. These sources illustrate that the collection of data within a crime management environment is largely non-structured and mainly *ad hoc* resulting in a highly tacit information base.

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#### **2.3.2.2. Information collection – pre computers**

As mentioned earlier, prior to the introduction of computers into police stations, crime management related data was stored manually in text format on cards and filed in cabinets. This data was usually station or district-specific. The data was analysed and information resulting from that analysis which was perceived to be important or relevant to others. This was then forwarded to centralised offices for storage. This process was usually managed and protected by an officer sometimes referred to as a “collator”. The collator’s task was to ensure that police officers recorded the important information they received in the course of their duty. The collator gave the information a rating scale and decided what information should be stored or discarded and what information should be disseminated. A criterion for the position of collator was an ability to intuitively and serendipitously link seemingly unrelated pieces of information to produce insights that could be used by other officers in the investigation of crime – in other words, the application of knowledge to information and data (Hughes & Jackson, 2005).

#### **2.3.2.3. Information collection – post computers**

A similar situation occurs today; however, the data is now stored in information systems and usually accessible to all officers, who must fulfil the role of ‘collator’ themselves. While information systems are being developed to assist with the management of the data and information, the ability to make sustainable strategic links between obvious data trends and ad-hoc information to create new knowledge appears to be limited. The information systems do not seem to have obviated the necessity for a formalised role and the self-conscious and strategic analysis of the information they administer. For example, for the past thirty years in Australia, even with the increased investment in information communication technology, coupled with increase of police officers per 10,000 people by approximately 37% - the rate of reported serious crime has outstripped the increase in those police numbers by more than 12 times or a rate of 450% (Billante, 2003). In addition the Home Office (2001) argues that only approximately 24 per cent of recorded crimes are detected, and about nine per cent result in a conviction. These statistics are even more concerning when

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it is considered that reported crime accounts for approximately 25 -30 per cent of all crime (Maguire, 1997).

#### **2.3.2.4. Information and strategic links**

This inability to make sustainable strategic links with stored information is not peculiar to police organisations, it is also a major point of concern within many private enterprises (Malhotra, 2002). Many organisations collect information, but gain little or no advantage from the process. This may be due to the ever-increasing ability and capacity to store data in electronic repositories, which in turn causes information overload, adds to the task of analysis and impacts potential knowledge outcomes.

A frequent and popular justification for the installation of improved information systems is that the outcome will lead to increased efficiency and productivity (Pace & Faules, 1994). That may be case depending on what is measured to indicate productivity. For example in one Western Australia police district alone “during the two year period 1999-2001 a total of 28 information reports were recorded, but with the introduction of the Incident Management System (IMS) this figure increased to 495 in the two year period 2001-2003.

Such increases are laudable within policing and might seem impressive when measured against key performance indicators, however, at best; the increase indicates the willingness of the public to report crime and the compliance of police officers to enter the report into police information systems. But the real measure is whether or not that information is translated to knowledge and shared and used when required. Accordingly, any investment in information systems need to be aligned with a corresponding investment in the resources and skills required to exploit the opportunities to turn data into knowledge (Chan et al., 2001; Dupont, 2001; Home Office Science Policy Unit, 2003).

#### **2.3.2.5. Mechanistic information collection**

The focus on information collection and quantifiable outputs rather than making sustainable strategic links by police is supported by a review of Western Australia Police information systems which found the service had over 800



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different data repositories. These repositories, also described in the report as 'information silos', existed within individual portfolios and units and catered for the specific information needs of specific functional areas. In many cases, the data collected was used to address the new public management requirements of producing measurable quantifiable key performance indicators. Consequently decisions tended to be portfolio-centric, they were made without sufficient analysis and without considering their impact on other areas of the organisation (Western Australia Police, 1998). The findings also support the assertion by Brown & Brudney (2003) and Froyland & Bell (1996) that police organisations tend to concentrate on the efficiency of data collection in a mechanistic way at the expense of organisational problem solving.

It is true that police managers must be efficient in the use and management of resources. However, efficiency initiatives implemented in a mechanistic fashion are not effective and lose sight of the 'essential humanness of the [police agency's] stakeholders, the workers and the clients (Froyland & Bell, 1996, p.74). Instead, efficiency strategies must be guided by knowledge or intelligent based strategies (Wiig, 1994).

#### **2.3.2.6. Intelligence – A change in policing practices**

The trends towards private enterprises becoming more knowledge focussed (Alavi & Leidner, 2001) is also evident in the policing environment. However, the practice used to describe this knowledge focus is generally described by the term intelligence. This term has become accepted within the "lexicon of modern policing" (Ratcliffe, 2003, p. 1). A search by Ratcliffe of all police web sites in Australia established that the term intelligence was found in each site.

The knowledge or intelligence based perspective postulates that services or activities conducted by tangible resources depend on how they are combined and applied, which is a function of an organisation's know how. This knowledge is embedded in and transmitted through many organisational entities including, culture and identity, policies, documents, systems and people (Alavi & Leidner, 2001).

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While the term intelligence may be used frequently, it appears that the concept and application of intelligence is not generally understood by many within policing organisations (Her Majesty's Inspectorate of Constabulary, 2001). The exact reason for this misunderstanding of the term cannot be easily explained, but the following assertion by a senior member of the Western Australia Police provides some explanation.

*Because we have not able to clearly articulate what policing style is effective, we adopted what many other police agencies are espousing which is the intelligence-led policing model. In my opinion the term intelligence-led is a misnomer, with everyone having a different opinion about what it means. To say that we are implementing an intelligence-led approach implies we have not been using intelligence in the past. In my opinion, what it really meant to encapsulate was the creation of knowledge so that informed decisions could be made. If the term knowledge sharing had been adopted it may have reduced some of the confusion we have today (Hughes, 2003).*

Currently the bulk of policing is reactive, and having regard to the nature of the industry, reactive policing is a given. However, the need to shift the weight from the reactive towards a more proactive style is the aim of practically every contemporary police organisation. This need is best described by the "riverbank" analogy (J. Stevens, 2001), which is explained as follows:

*Being a policeman in the 21st Century is like being the man who was standing on the bank of a very fast flowing river. In that river he could see hundreds of people being swept along struggling to stop from drowning. As each moment passes their numbers swell until there are thousands of people all gasping and shouting to the man on the bank to help them. What do we do as police officers? Go in and help as many as we can? Or do we take a walk upstream and find out who is throwing them all in? I have a feeling that most of the time police have been wading in to the rescue! And so begins a reactive cycle of uncontrolled demand and equally uncoordinated response. The police become like life guards frantically swimming against the tide from one incident to another, employing different tactics in a disjointed and unfocussed manner with little or nothing to show for it at the end of the day (p. 3)*

This approach to policing has been described as mechanistic policing demanding unthinking conformity and limited flexibility. In addition creativity is reduced and no real attempts are made to solve out-of-the-ordinary problems (Froyland & Bell, 1996, p. 73).

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To move from this mechanistic impediment of uncontrolled demand and uncoordinated response to one of problem solving, requires a strong knowledge creation and sharing base. The provision of such a knowledge base can be assisted through the development of an equally strong knowledge support infrastructure. This can be achieved by recognising the humanness and diversity of workers and by treating this diversity as an advantage rather than a disadvantage (Froyland & Bell, 1996).

It appears that recognition of the humanness and diversity of workers has been substituted with information technology systems. These systems are perceived by a number senior managers as systems that will confer on police a unique expertise and a positive image as knowledge workers (Dupont, 2001). However, since previous mobility and communication technologies have not resolved the problems of policing, it is doubtful if information and knowledge enabling technologies will be any different (Dupont, 2001). This is not to suggest that police agencies should not invest in new technologies. In fact, many police practitioners, such as investigators and intelligence analysts, could not operate in today's environment without such technologies. Rather, it is more to stress that an unreflective reliance on these technologies, may be at the expense of effective crime prevention solutions. Furthermore, 'circumspection and perceptiveness' are required when deciding what will or will not work in relation to policing and technology (Dupont, 2001, p. 46).

### **2.3.3. Summary**

This section examined policing within the context of knowledge management. It explored the history of policing and the development of its hierarchical command and control structure. It looked at the development of technology on policing practices especially the influence of information communication technology on the creation of knowledge. It found that similar to many private organisations, police have tended to direct their capital investments towards information technologies at the expense of human resources.

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## **2.4. Conclusion**

This literature review integrated two disciplines - knowledge management and policing. The immediate research discipline (knowledge management) looked at the definition of knowledge and the progression of knowledge management research over the past number of years within industry and academia. It found that early research inputs concentrated on establishing the difference between data, information, and knowledge. This was followed by research concentrating on the concept of tacit and explicit knowledge and the distinction between individual and collective knowledge. Later research concentrated on strategies to leverage knowledge in an effort towards enhancing competitive advantage. Currently the majority of knowledge management research concentrates on using technology as a solution to managing knowledge. However, this approach tends to be the expense of human influences and human processing, which in effect acts to widen the gap between information management and knowledge creation and sharing.

Gaps in the research indicate that even though information collection and knowledge creation and sharing is the stock-in-trade of policing, very little research has been conducted to understand the factors that facilitate knowledge sharing. The best this review could uncover was limited research relating to information technology and its impact on policing. Despite this paucity of this research, police agencies have invested in and embraced information technologies in an attempt to improve information gathering and knowledge sharing. However, an unreflective reliance on these technologies appears to have neglected the human element, which is necessary to turn data and information into knowledge.

Others argue that information and communication technologies are perceived by a number of senior managers as technologies that confer on police a unique expertise and a positive image as knowledge workers. While such systems may go some way to improving information management, it can be seen that information is not enriched into actionable knowledge until people are involved in the knowledge creation process.

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The goal of knowledge management is not to manage all knowledge, but to manage the knowledge that is most important to the organisation. It involves marshalling and applying the collective knowledge and abilities of the entire workforce to achieve specific organisational objectives. The only valuable knowledge is that which equips people for action (Sveiby 1997). To get this action involves getting the right information and subsequent knowledge to the right people at the right time, and helping people share knowledge and act in ways that will improve individual and organisational performance. Such strategies give people the 'capacity to act' and assists in creating value by reducing the time and expense of trial and error or the continual reinvention of the wheel (Plunkett, 2001; Sveiby 1997).

To that end, strategies need to be developed to improve knowledge sharing. One such strategy employed by most police agencies has been the introduction of information technology systems, heavily marketed as knowledge management tools. However, the development and implementation of such a strategy can be problematic unless police managers have an understanding of the organisational and human factors that facilitate and inhibit the sharing of knowledge. In addition, police managers must realise that particular knowledge sharing strategies espoused in the literature will not suit all organisations and as such, detailed research needs to be conducted within each organisation in order to establish the inhibitors and facilitators relevant to each.

This research was developed to assist with answering that very problem. The next chapter discusses the methodology I adopted and the process I used to investigate and understand the factors contributing to that phenomenon.

## CHAPTER 3 - METHODOLOGY

You will of course keep your eyes open.  
There is a lot to be learned just by  
observing, some of it evident within minutes  
of entering a situation

(Dick, 2005)

### 3. Chapter – Methodology

<div data-bbox="222 312 244 334">□</div> <div data-bbox="222 628 409 690"><b>Self Reflection and insight</b></div> <div data-bbox="222 753 419 873"><i>My convergence with action research and how I changed</i></div>	<p>When I first introduced my methodology at my research proposal presentation, I conceived it as a standard straightforward process of collecting data through workshops and questionnaires. This was to be followed by content analysis and deriving insight into my question backed up with hermeneutic enquiry. I was confident, and so were my reviewers, that my methodology had a clear structure, with clear questions which I argued would result in a clear set of outcomes.</p> <p>Armed with this methodology, I set about researching my question. However, as I became more involved with my research, I soon realised that my linear research concept was not adequate. I say this because during my research I noticed the process itself began to have an influence on the participants and furthermore I noticed small changes in the organisation around me.</p> <p>These changes included employees not only having a better understanding of knowledge sharing but also using knowledge management terminology outside the confines of this research. I also began to realise the importance of Hall's (2003) findings, that in order to get a richer insight into knowledge sharing specifically to my policing organisation, I would have to delve deeper into the 'what' and 'why' of knowledge sharing. (This point was reinforced later in my research by Reige (2005))</p> <p>I discussed these observations with my supervisor. Through a series of discussions and debate, we realised that there was an element missing from my methodology. Even though I had a framework for collecting and analysing the data, I did not have a way to explain the obvious changes which were happening around me or a way to delve deeper to understand these changes. Looking for an explanation, I became familiar with the concept of 'Action Research'. As my interest and understanding of action research grew, I began to see my research from a different perspective.</p> <p>The most relevant observation was that I had become part of a social network and my original intention of using hermeneutics, as my methodology, did not seem sufficient, by itself. The hermeneutic approach concentrated too much on 'me' looking at the data rather than 'me' as an individual who is part of the data – I was trying to conduct research on my colleagues rather than with my colleagues. While my initial intention was to use hermeneutics as my methodology – action research became the unfolding reality.</p> <p>This change can be best described as an isolated hermeneuticist becoming a social being aware of his own actions on others and his evolving interpretations of the research. It allowed me to enrich my understanding into how research actually influences participants behind the scenes or as I called it in conversation with my supervisor - 'change after I leave the room'.</p>
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### **3.1. Introduction**

In chapter one, I briefly introduced my research methodology. In this chapter, I build on that introduction and provide assurance that appropriate research procedures were followed by presenting my research methodology in greater detail. I present justification for adopting an action research case study within an interpretative qualitative paradigm. I also discuss the benefits of using the principles of hermeneutic enquiry as the basis of my data analysis

### **3.2. Research Question**

The primary objective of this study is to gain an understanding of the facilitators and inhibitors to knowledge sharing in the Western Australian Police, specifically concentrating on intelligence-led crime management portfolios. By combining my personal experience and the frames of reference provided to me through my academic learning, I formulated the principal research question to be:

***What lessons can be learned from examining the facilitators and inhibitors to knowledge sharing in an intelligence-led crime management environment within the Western Australian Police?***

The following steps towards this thesis were:

1. Identifying the key organisational inhibitors and facilitators to knowledge sharing;
2. Identifying the key inhibitors and facilitators to knowledge sharing as espoused by individual staff members; and
3. Deducing principles that can be used to enhance knowledge sharing within a distributed investigative policing environment.

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### **3.3.      *Unit of analysis***

The core unit of analysis was the Western Australia Police, which expressed a willingness to be associated with this study. This organisation was selected for two reasons. First, it has invested significantly in Information Communication Technology (ICT) to assist in the collection and distribution of information to assist with the investigation of crime and intelligence analysis. Second, having spent 25 years in policing spanning two police agencies and one law enforcement organisation, including the Garda Siochana (Ireland), the Western Australia Police and the Australian Crime Commission (formally National Crime Authority) I had both knowledge of and access to data sources. Later in the research, I used an education program conducted by the Australian Federal Police as a benchmark against which to measure an emerging solution. This solution is discussed in detail in section 4.3, page 137.

### **3.4.      *Profile of the subjects***

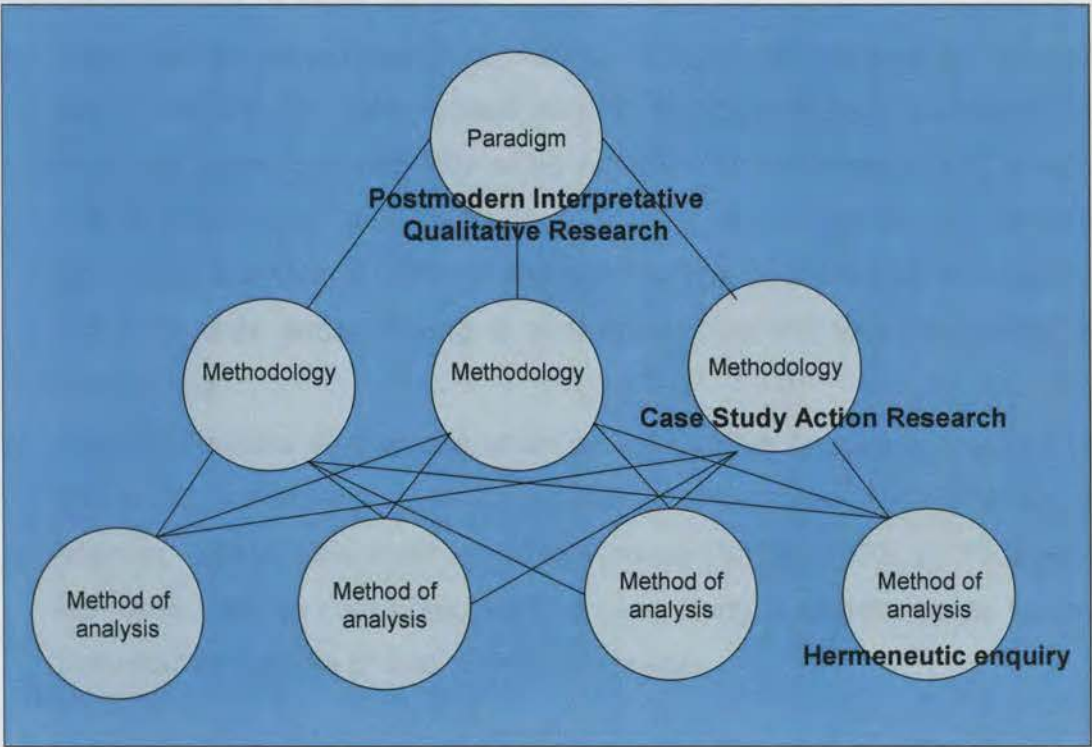
The Western Australia Police has a staff of approximately 4,500 police officers and 2,000 public servants employed across two distinct areas – operational and administration. Research participants spanned vertical levels and functional units/groupings of the organisation and included general operations, specialists, public servants, and managers. However, it was an essential criterion that all participants were currently working in or had a crime-management or intelligence related background.

### **3.5.      *Action Research Case Study***

As with most decisions, the choice of research approach depends upon weighing up of the advantages and disadvantages of different alternatives. The choice should focus on the suitability of the research paradigms, methodologies and methods available to investigate the research problem. Having regard to my opening comments on the evolution of my methodology, the research

approach for this thesis followed an interpretative qualitative professional case study action research orientation (Dick, 1997; Sankaran, 2001; Whitehead, 2004; M. C. Williams, 2004) supported by hermeneutic enquiry (Froyland, 1991; O'Callaghan, 1997; Packer & Addison, 1989).

Action research is known by many other names, including Participatory Research, Collaborative Inquiry, Emancipatory Research, Action Learning, and Contextual Action Research, however, they all have one core theme - learning by doing (O'Brien, 2001). I reintroduce the following figure to illustrate the structured view of my research approach. At the end of this chapter, I show a more dynamic picture of my research. (See figure 15 page 89).



**Figure 14 - Research choices - paradigm, methodology, and methods.**

Adapted from (Dick, 1993)

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### **3.5.1. Case study approach**

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003). It focuses on the characteristics, circumstances, and complexity of a single case, or a small number of cases, often using multiple methods. The case is viewed as an entity valued in its own right and even though the findings can raise awareness of general issues, the aim is not to generalise the findings to other cases. The case study approach for this thesis was governed by two primary factors; (1) appropriateness and (2) validity.

#### **1. Appropriateness of case studies:**

- Case studies are an excellent method of data collection when 'how or why' questions are being posed relating to contemporary phenomenon when the researcher has little or no control over the events (Yin, 2003). This is relevant to this thesis in that in order to identify the factors influencing knowledge creation and sharing one of the richest sources of data was when endeavouring to understand how and why knowledge is shared; and
- Case studies are appropriate when an interpretive enquiry is required to gain a full understanding of the problem under investigation (Packer & Addison, 1989). This point is supported by Punch (1998, p. 150) who espouses that the core objective of a case study is to develop as full an understanding of the phenomenon as possible.

#### **2. Validity of case studies**

- Case studies are advantageous to obtain the details from the viewpoint of the participants (Tellis, 1997);
- Case studies are used effectively in other social science research disciplines such as psychology, sociology, anthropology, history and economics (Yin, 2003); and case studies and interpretive research are now accepted as a valid research strategy among information system researchers (Klein & Myers, 1999).

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Previously, qualitative approaches to research, including case studies, have been criticised for a lack of rigour and validity, especially in relation to the validation of data and conclusions (Benbasat & Zmud, 1999; Lee, 1999; Sarantakos, 1993). However, such criticisms are waning, mainly because contemporary researchers are now accepting that since all research methods are never completely flawless, no single method, quantitative or qualitative, is better or worse than the other (Balnaves & Caputi, 2001; Dennis & Valacich, 2001, p. 5). While 'many qualitative methods are steeped in the positivist tradition' (Lacity & Janson, 1994, p. 137), it is now generally accepted that positivist research criteria are not always appropriate in achieving social research outcomes (Klein & Myers, 1999; Tesch, 1990).

Throughout my research, I paid attention to such criticisms and ensured that every effort was made to ensure rigour and validity was maintained. In this thesis, rigour and validity were strengthened by using the action research methodology supported by the seven principles of hermeneutic enquiry as proposed by (Klein & Myers, 1999).

### **3.6. *Data Collection and analysis***

Data for this research was collected in a number of ways. Initially the core method was individual interviews and focus groups. The interviews involved planned face-to-face discussion with 40 individual employees from within the Western Australia Police. These included sworn police officers and public servants recruited from various management levels. Each had a current or previous crime management or intelligence background. To enable consistency of responses, this interview process was preceded by a short session articulating the concept of knowledge and sharing as defined within the thesis.

However, having regard to time and expense in conducting one-on-one interviews, group interviews were also utilised. The group interviews were used to allow the development and distillation of questions through group norms and dynamics and while not as controlled as face to face interviews, they provided an alternative rich data source (May, 1993). The group interviews consisted of

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three focus group type interviews with members attending the Police Officer Development Course. This is a management course consisting of 20 senior staff members (60 in total). These sessions began by articulating the concept of knowledge and sharing as defined within this thesis. I then asked semi structured questions relating to their experience and understanding of knowledge sharing inhibitors and facilitators within the Western Australia Police.

Even though it would have been beneficial to use a tape recorder to record the data, some people find the presence of such devices inhibiting, which influences the content of the interview (May, 1993). This point is relevant when dealing with police officers. It is my experience that even though police officers will electronically record witness and suspect statements, this practice is not generally reciprocated when the tables are turned. Therefore, the interviews were not electronically recorded. Instead, hand written notes only were taken during the course of the interviews.

As I began to delve deeper into my research and the organisation, I also encouraged dialogue about knowledge sharing between participants during ongoing work projects and other related work duties. In many cases, these *ad hoc* conversations were an excellent medium in which to test the validity or otherwise of data collected from the structured interviews. On the negative side, I found, at times, that it was difficult for my colleagues to separate the research project from actual working projects. In the majority of cases, this did not cause any problems as most of my colleagues had become as engrossed in the research as me. As one colleague jokingly said that as time went on, he felt he knew more about the subject than I did. Nevertheless, to address this problem I regularly informed my colleagues that such conversations might be referred to in my research especially when the dialogue generated new insights, critiques or developments. This approach worked extremely well and not only did it act as way to draw the line in the sand between my research and other work projects, it also addressed the ethical aspects of my research in that colleagues could refuse to become involved. The interpretation of the data was guided through the principles of the Hermeneutic cycle following Klein and Myers



(1999) which is discussed later. It was in this way that that my research evolved into action research.

Whether I was interviewing in a group or an individual setting, I explained the rationale for my research which also involved explaining the concept of knowledge management and knowledge sharing as discussed in Chapter Two. Participants were encouraged to ask questions and clarify any matters of concern or confusion. When I felt participants had a reasonable understanding I asked the following opening question:

*What are your views relating knowledge sharing within the Western Australia Police?*

This opening question was generally followed with semi structured questions relating to their experience and understanding of knowledge sharing inhibitors and facilitators within the Western Australia Police. This technique assisted in developing continual dialogue. In the classroom sessions, an electronic whiteboard was used to record responses. In relation to the face-to-face interviews, and work-place conversations; I took notes.

In order to ensure consistency of questioning but more importantly flow of dialogue, I used the factors listed in the table below as prompts when deemed appropriate:

**Table 7 - Prompts to generate dialogue and consistency of questioning**

Developed for this research from the literature. See Table 2 chapter 2.

Factors	Context
Rejection	Do you feel that fear of rejection is a reason why knowledge is not shared?
Culture and Leadership	What influence does culture and leadership style play?
Trust	How important is the element of trust of others (perceived or otherwise) in facilitating knowledge sharing. Are there any particular groups between which trust is poor? If so, explain how this influences knowledge sharing?
Time	It is suggested that we are now too busy to take the time to share knowledge – what are your views about this suggestion?
Power	Does sharing of knowledge lead to a loss or an increase of power?
Rewards	Are incentives and rewards necessary to facilitate knowledge sharing?



<b>Self Interest</b>	'Employees share out of self interest rather than common good' – do you agree with this statement?
<b>Technology centric</b>	Is IT an inhibitor or facilitator - i.e. is IT seen as a inhibiting rather than facilitating KM initiatives?
<b>Commitment to group/organisation</b>	What impact does working as part of a group have on knowledge sharing?

The data obtained from interviews and focus groups were examined in terms of themes, motifs and key words using the software package *MindManager Pro* see Appendix 1. This program not only allowed me to categorise and group data into similar topics it also allowed me to store details and notes of the interviews for later retrieval and examination.

In order to add rigour to the analysis, other sources such as internal documents, archival records, artefacts and reflective analysis were triangulated against the interview data (Yin, 2003). This procedure coupled with the action research methodology and hermeneutic analysis was instrumental in reflecting the grounded experiences and interpretations of the actors in their own context, while also offering an analytic framing that may also be useful to others in other contexts (Orlikowski, 1996, p. 27).

### 3.6.1. Action Research framework

Action research is a qualitative social research approach which has the dual objectives of action and research - **action** to stimulate change in a community or organisation, and **research** to increase understanding of the system under investigation (Dick, 1993). Typically, action research is a reflective process that allows for inquiry and discussion as components of the research. It is often a collaborative activity among colleagues searching for solutions to everyday, real problems and concerns experienced in the workplace (Ferrance, 2000).

In other words, action research is about working toward practical outcomes, and also about creating new forms of understanding, generally within a workplace setting. It is based on the premise that action without reflection and understanding is blind, and theory without action is meaningless (P Reason,

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2001). Dick (2002) later advanced this notion of action research by describing it as a flexible spiral process, similar to the hermeneutic circle, which allows change and understanding to be achieved at the same time. In short it is a quest for knowledge about how to improve and do things better (Ferrance, 2000).

My overarching reason for selecting this approach is similar to the explanation given by Sankaran (2001, p. 3). I was studying my work colleagues within their 'natural setting' and traditional scientific research paradigms did not seem appropriate. The appropriateness of a positivist approach as opposed to a qualitative interpretive approach has been discussed at great length by Checkland (1981). He argues that the complexity of social phenomena poses difficult problems for positivistic approaches as they have not been able to tackle what we perceive as 'real world' problems as opposed to the 'scientist-defined problems' of the laboratory (P.13).

I knew I had to recruit participants with a crime management and intelligence background, however, I found that suitable participants were limited in number. This scarcity was exacerbated by the exigencies and reactive nature of police work, making it difficult to isolate participants for long periods of time. While I did have access to staff members attending Officer Development Courses, the time allowed to me was extremely limited for a thorough examination of all the possible variants involved. However, my preference for action research was strengthened when I was given the opportunity by the Commissioner of Police to participate in work practices alongside the research participants and become actively involved in the phenomenon being studied.

At this stage, I felt that an action research case study was responsive to my situation and offered the best opportunity to address my research dilemma (P Reason, 2001). One reason for this was that because of my extensive experience in policing I was sensitive to the topic under study which is a distinct advantage in eliciting information and understanding the subtlety of individual and organisational issues (Fernandez et al., 2002).



The major strength of this methodology is that it simultaneously facilitated the quest for understanding and practical solutions (R. M. Mason, 2001) by allowing me to mix rigorous research with practical application. In addition, I saw it as a my way to achieve both academic and professional empowerment (Erwee, 2002; Perry, 1998a; M. C. Williams, 2004).

The emphasis of an action research case study is that researchers are actively involved with the situation or phenomenon being studied; ensuring that any knowledge developed in the investigation process is directly relevant to the issues (Robson, 2002). Dick (1993) also suggests that it is reasonable that there can be choices between action research and other paradigms, and within action research a choice of approaches.

Table 8 below provides a comparison between action research and positivist science. It can be seen that the detached, predictive and precise characteristics of the positivist research precluded this method as a way to fully understand and answer my research question.

**Table 8 - Comparisons of positivist science and action research**

Source - (Susman & Evered, 1978, p. 600)

Points of comparison	Positivist science	Action research
Value position	Methods are value neutral	Methods develop social systems and release human potential
Time perspective	Observation of the present	Observation of the present plus interpretation of the present from knowledge of the past, conceptualisation of more desirable futures
Relationship with units	Detached spectator, client system members are objects to study	Client system members are self-reflective subjects with whom to collaborate
Treatment of units studied	Cases are of interest only as representatives of populations	Cases can be sufficient sources of knowledge
Language for describing units	Denotative, observational	Connotative, metaphorical
Basis for assuming existence of units	Exist independently of humans	Human artefacts for human purposes
Epistemological aims	Induction and deduction	Conjecturing, creating settings for learning and modelling of behaviour
Criteria for confirmation	Logical consistency, prediction and control	Evaluating whether actions produce intended consequences
Basis for generalization	Broad, universal and free of context	Narrow situational and bound by context



The action research method was detailed further by Grundy (1982 as cited in Masters 2000) who suggested the following three types of action research in the table below.

**Table 9 - Three types of action research**

Source (Masters, 2000)

Points of comparison	Technical Action Research	Mutual - Collaboration Action Research	Participatory Action Research
<b>Philosophical Base</b>	Natural Sciences	Historical – hermeneutic	Critical Sciences
<b>The nature of reality</b>	Single, measurable, fragmental	Multiple, constructed, holistic	Social, economic. Exists with problems of equity and hegemony
<b>Problem</b>	Defined in advance	Defined in situation	Defined in the situation based on values clarification
<b>Relationship between the Knower and Known</b>	Separate	Interrelated, dialogic	Interrelated, embedded in society
<b>Focus of collaboration theory</b>	Technical validation, refinement, deduction	Mutual understanding, new theory, inductive	Mutual emancipation, validation, refinement, new theory, inductive, deductive
<b>Type of knowledge produced</b>	Predictive	Descriptive	Predictive, descriptive
<b>Change duration</b>	Events explained in terms of real causes and simultaneous effects	Events are understood through active mental work, interactions with external context, transactions between one's mental work and external context	Events are understood in terms of social and economic hindrances to true equity
<b>The nature of understanding</b>	Events explained in terms of real causes and simultaneous effects	Events are understood through active mental work, interactions with external context, transactions between one's mental work and external context	Events are understood in terms of social and economic hindrances to true equity
<b>The role of value in research</b>	Value free	Value bounded	Related to values of equity
<b>Purpose of research</b>	Discovery of laws underlying reality	Understand what occurs and the meaning people make of phenomena	Uncover and understand what constrains equity and supports hegemony to free oneself of false consciousness and change practice toward more equity

While this graph provides a neat categorisation and description of three action research types, I do not believe that the action research methodology follows such a structured approach. Considering the exploratory and dynamic nature of

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action research, the categorisations may act as impediments to the quest for knowledge and reduce the potential to generate genuine and sustained improvements. In any organisation, people can have confused, incomplete, cloudy and contradictory views on many issues (Myers, 1997) as such, researchers may find themselves switching between the three action research types depending on the context of the situation especially the assumptions and views of the participants. While my research shifted between the three categories, having regard to the constant collaborative discourse and dialogue, my research was predominantly 'Mutual – Collaboration' action research.

### **3.6.2. Data analysis - Hermeneutic perspective**

It has been argued that the analysis of data is one of the least developed aspects of the case study methodology (Tellis, 1997). As such, it is important that case study researchers make sure that the analysis is of the highest quality. Data analysis consists of examining, categorising, tabulating, or otherwise recombining the evidence to address the initial propositions of a study (Fowler, 1993; Yin, 2003). Yin (2003) suggests some possible analytic techniques such as pattern-matching, explanation-building, and time-series analysis. Miles & Huberman (1984) also suggest alternative analytic techniques of analysis such as using arrays to display the data, creating displays, tabulating the frequency of events, ordering the information, and other methods.

Whatever method is selected, the analysis must be done in a way that will not bias the results. In general, the analysis must rely on the theoretical propositions that led to the case study in the first place. If theoretical propositions are not present, then the researcher should consider developing a descriptive framework around which the case study is organised. Accordingly, no matter what strategies the action researcher pursues to maintain research rigour, they must employ a process that is flexible and responsive to the research situation. (Dick, 2000).

Most action research proponents agree that action research is cyclic, or at least spiral in structure. For example, Reason & McArdle (2004) maintain that action

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research typically involves groups of participants and co-researchers and co-subjects engaging in cycles of action and critical reflection. Or as Ladkin (2004) put it - the knowing is seen to be embedded within cycles of action and reflection. However, this basic process has been elaborated in different ways in different schools of practice. For example Stringer (1999) maintains that action research works through three basic phases: **Look, Think and Act**. The look phase refers to building a picture and gathering information, the think phase relates to interpreting and explaining and the act phase attempts to resolve issues and problems. Kemmis & Mc Taggart (1988) propose a **Plan, Act, Observe, and Reflect** approach and Dick (1993) suggests an '**Intend Act and Review**' process. While different terms for the phases are used by the researchers, it can be seen that the essence of the approach is similar. Each follows a cyclic movement involving an observation component, an intervention and a reflection component the results of which are enhanced through each cycle. Accordingly my preferred qualitative instrument used to analyse the data in this thesis was the Hermeneutic approach as espoused by Packer & Addison (1989).

Hermeneutics is derived from the Greek word *Hermeneuein*, meaning to interpret. It is the art and study of interpretation and is a useful research approach "when the central issues concern the nature of meaning, experience and power" (Kellehear, 1993, p. 42). This methodology was successfully used by Standing & Benson (2000) in an attempt to understand knowledge sharing within a university environment. Froyland (1991) and O'Callaghan (1997) used it to explore training and educational phenomena within a policing environment. Others such as Lee (1994) and Lacity & Janson (1994) have used it in information systems research.

Essentially the hermeneutic researcher or Hermeneuticist looks at human activity in its context as the foundation of in-depth enquiry. The focus is on the nature of meaning based on participants' opinions, emotions and attitudes rather than just observed behaviour (Froyland, 1991; Packer & Addison, 1989). To do this the Hermeneuticist delves deeply into the subtle world of social and personal meaning. The findings of such research are deemed to be temporary



since the focus is subjective and as such they are continually changing and therefore never complete (Kellehear, 1993).

**3.6.2.1. Comparison with other research perspectives**

Table 10 below provides clearer understanding of the hermeneutic philosophy compared with other research perspectives:

**Table 10 - Comparing Empiricist, Rationalist, and Hermeneutic Perspectives**  
(Packer & Addison, 1989, p. 16)

Points of comparison	Empiricism	Rationalism	Hermeneutics
<i>Domain of enquiry</i>	Independent entities with absolute properties	Formal structure underling appearances	Action in context: Texts and text analogues
<i>Ground of knowledge</i>	Foundation provided by interpretation free facts; brute data	Foundation provided by axioms and principles	Starting place provided by practical understanding: articulated and corrected
<i>Character of explanation</i>	Statements of regularities among data. Causal laws	Formal, syntactic reconstruction of competence	Narrative accounts; a reading of the text
<i>Method: Relationship to be researched</i>	Objective value neutral stance	Detachment; abstraction from context.	Familiarity with practices; participation in shared culture.
<i>Method: Justification of explanation</i>	Assess correspondence with reality	Assess correspondence with intuitions of competent person	Consider whether interpretation uncovers an answer to its motivating concern

It can be seen that hermeneutic enquiry is suited to action research in that the aim of the hermeneutic analysis becomes one of trying to make sense of the whole, and the relationship between people and the organisation (Myers, 1997) and the changes that occur over time. This axis is very important in providing a self awareness of the changing self.

While hermeneutic enquiry maintains that a starting point for enquiry should be established, it differs from most other analytical frameworks in that it proposes that this starting point should not be considered as the foundation for other studies. Since the world in which we live in is constantly, changing, hermeneutic enquiry argues that any desire to come to a conclusion and end “at some resting place” must be resisted. As Packer & Addison (1989, p. 35) insist, any attempt to put all findings to rest does not mark the triumph of science so much as the loss of the capacity to encounter new concerns and uncover fresh

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puzzles. Accordingly, it emphasises that the starting point for research should differ from study to study.

A well conducted interpretive enquiry does not necessarily provide a complete and timeless truth, instead it provides an answer to the phenomenon that triggered the research (Packer & Addison, 1989). In the final analysis, the principle outcome of all social research is an understanding and insight into the social, technical, economical, environmental and political circumstances in which phenomena occur (R. O. Mason, McKenney, & Copeland, 1997). I am confident that this understanding and insight is possible by employing an action research approach supported by the principles of hermeneutic enquiry.

**3.6.2.2. Principles of Hermeneutic enquiry**

To ensure the integrity of hermeneutic interpretation, Klein and Myers (1999, p. 71) propose seven principles for the evaluation of data. They say that these principles should not be looked upon as bureaucratic rules of conduct, instead they encourage researchers and reviewers to exercise their discretion and judgement in deciding the appropriateness of each principle. Throughout this thesis, I endeavoured to observe each principle. The following table outlines the principles by giving a brief overview of their meaning and the manner in which they were observed throughout my research. An expanded explanation of each principle is also presented.



**Table 11 – My observation of the seven principles of hermeneutic enquiry**

(Developed for this research based on Kllien & Myers pg 72)

	Principle	How observed within this research?
1	The fundamental principle of the hermeneutic circle	This principle is regarded as being the most fundamental and foundational to all hermeneutic enquiry. It is in effect a meta-principle on which the other six principles are developed and revisited over the time of the research.
2	The principle of contextualisation	My research was conducted within the context of the crime management and intelligence portfolios of the Western Australia Police. Throughout this study I developed a detailed exposition of the environment and participants involved.
3	The interaction between the researchers and the subjects.	The interviews conducted were semi-structured. This structure allowed interviewees to talk about the topic in terms of their own experiences. Workplace conversations were also initiated relating to the research problem. My initial findings were presented to participants for comments and clarification
4	The principle of abstraction and generalisation.	The aim of my research was to develop a warranted set of principles to provide a greater understanding of the key factors facilitating and inhibiting knowledge sharing in a policing environment. I had no expectation of developing a single coherent model.
5	The principle of dialogical reasoning.	Throughout the dialogical reasoning process, I was at all times aware of my policing background and the prejudices that guided me to this research destination. The critical task was to distinguish between the true prejudices by which I understand the phenomenon, from the false prejudices from which I misunderstand the problem.
6	The principle of multiple interpretation.	This principle requires researchers to examine the social influences upon the action under investigation. I achieved this by seeking out multiple viewpoints along with the corresponding reasons.
7	The principle of suspicion.	Scepticism was applied to the interpretation of information from the various different sources to identify false consciousness, defensiveness or lack of authentic reflection

### ***1. The fundamental principle of the Hermeneutic circle***

This principle is regarded as being the most fundamental and foundational to all hermeneutic enquiry. It is in effect a meta-principle on which the other six principles are developed. In the hermeneutic approach, interpretation and analysis are not separate elements as is the case with the scientific approach. Rather than be seen as two ends of a spectrum they are viewed as been on the circumference of a circle. Establishing a point of view forms the 'forward arc' of the circumference, while interpretation forms the 'reverse arc', very similar to a spiral effect and otherwise referred to as the Hermeneutic Circle (Packer & Addison, 1989, p 34). The hermeneutic circle or spiral has been compared by with the plan, act review cyclic philosophy of action research (Dick, 1993).

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For example, in the forward arc or 'projection' of the circle, researchers are propelled into future ways of acting that are facilitated by personal cultural and historical perspectives. In the backward arc or the 'movement of return', researchers gain an understanding of what the 'fore structure' involves and where change may be required. While this circularity allows researches to understand based on what they already know, it is not a tool to confirm biases and prejudices, it is an essential approach without which there would be no learning at all (Heidegger 1927/62, cited in Packer and Addison 1989 ). A good example of this circularity in practice is Marshall's application and testing of ideas and practices back and forth through her research and what she terms the rest of her life (2004).

Having regard to the continuous changing nature of policing, and the environment within which it operates the concept of the hermeneutic circle and enquiry was deemed a suitable interpretive approach for this thesis. Not only did it ensure the validity of the line of enquiry being studied, it also ensured it did not come to a resting place. Instead I believed, in line with the action research philosophy, it was instrumental in keeping the discussion open and alive so that others may continue this enquiry in different settings if they so wish.

## ***II. The principle of contextualisation***

This principle requires critical reflection of the social and historical background of the research setting (Klein & Myers, 1999). Throughout this study a detailed exposition of the environment and participants was developed. For example, at the macro level a broad overview of the history of policing and its evolution in Western Australia was explored in Chapter 2. At the micro level, this study was set within the context of the crime management portfolios of the Western Australia Police.

## ***III. The interaction between the researchers and the subjects***

In the spirit of action research philosophy, I conducted this research in my own work (natural) environment. As such, data was collected on a continual basis over the life of the research through relevant organisational documentation, interviews, conversations, direct observations and feedback. In addition, the

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study also incorporated professional reflective analysis. This reflection was based on developing new text from listening to responses and reflecting why such responses were made.

Initially the interviews conducted, as part of this thesis, were semi-structured. This structure allowed interviewees to talk to me and among themselves about the topic in terms of their own experiences (May, 1993). It was also very useful in allowing me to develop a rapport with the participants which in turn paved the way to engage in full discussion of the questions and responses (Simon, 2001). This method also recognised that the participants, just as much as the researchers, can act as interpreters and analysts (Klein & Myers, 1999). In effect, they become co-researchers (McNiff et al., 2003).

Recognising that participants can also act as researchers and interpreters, my data collection source approach later leaned towards one-on-one interviews and conversations. These interviews and conversations allowed for greater interaction between the participants and me. They also facilitated open conversation, whereby respondents provided rich personal insights that may not have been gleaned solely from structured interviews and questionnaires.

As I became more involved in the research, many ad-hoc interviews occurred. While most of these conversations were initiated by me, it was heartening to see that quite a few conversations were initiated by others who were either interested in my research or had spoken to me previously and were providing more advice or insight. It was through these conversations that I gleaned probably my richest and most insightful data. It was also through such conversations that I was able to test and verify information gathered in other situations. This also assisted with the principle of suspicion (see principle vii below). This engagement made clear to me the extent to which I was influencing the objective of the study.

#### ***IV. The principle of abstraction and generalisation***

Four types of generalisations are possible from interpretive case studies. These are:

- 
- The development of concepts;
  - The generation of theory;
  - The drawing of specific implications; and
  - The contribution of rich insight (Walsham 1995 cited in Klein & Myers, 1999).

As mentioned previously the outcome of this research was to provide a greater understanding of the key factors facilitating and inhibiting knowledge sharing in a policing environment. In accordance with the interpretive action research and hermeneutic position, there was never any expectation of developing a single coherent model. The significance of this research is related more to sense making and understanding through the contribution of rich insight (Weick, 1995), rather than attempting to present a definitive conclusion (Packer & Addison, 1989).

#### ***V. The principle of dialogical reasoning***

Within Hermeneutic enquiry, prejudice, prejudgement or prior knowledge plays an important role in the interpretation and understanding of research findings. A requirement of this principle is that researchers confront their own preconceptions and be aware of the original lens that guided the research question (Klein & Myers, 1999).

It is argued that action research differs from the scientific methodologies in that its core assertion is that researchers, no matter how they try, cannot be completely objective or detached from the phenomenon under investigation (Packer & Addison, 1989). Over the past two decades, the conventional approaches to both physical and behavioural research have been questioned arguing that similar to social science, the subject of science cannot be completely objectified (Bleicher, 1982).

While positivist researchers endeavour to be control-orientated and context free, having regard to the human settings within which research is conducted, the threat of contextual bias is always present (R. O. Mason et al., 1997). As argued by Heidegger (1962, cited in Packer and Addison 1989) unless



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researchers are totally isolated from the real world, they will have some preliminary understanding of what the phenomenon is and what possible things might happen to it. This in effect means that researchers both understand and misunderstand the matter under investigation. Consequently, researchers shape the phenomenon to fit a position moulded by their own expectations and preconceptions. It could be argued, therefore, that the concept of scientific reliability is structured more around the 'culture of professional conformity' than it is about the pursuit of understanding (Kellehear, 1993).

I did not see this 'culture of professional conformity' argument as an impediment to my research. Instead I saw it as a necessary condition in which to undertake the research within the environment and setting proposed (Kellehear, 1993). Contrary to the positivist, empiricist, and rationalist research philosophies, I stood "at the centre of the research process as a requirement of understanding social life" (Kellehear, 1993, p. 9).

In addition, since knowledge cannot be built from scratch, and that interpretation of messages is central to human existence, researchers should not dismiss their culture and past (Packer & Addison, 1989). To that end, this research enquiry operated in a similar way to historical researchers in that I had to trade 'tightness of control' for 'richness of reality' (R. O. Mason et al., 1997, p. 308).

Throughout this dialogical reasoning process, I was always aware of my policing background and the prejudices that guided me to this research destination. A critical task for me was to distinguish between the true prejudices by which I understood, and the false ones from which I misunderstood the phenomenon. In other words, I tried always to be aware of my historicity and how it could influence the research outcomes (Gadamer 1976 as cited in Klein & Myers, 1999, p. 76).

## ***VI. The principle of multiple interpretation***

This principle requires researchers to examine the social influences upon the action under investigation. This can be achieved by seeking out multiple viewpoints along with the corresponding reasons (Klein & Myers, 1999).

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The findings need to be verified and distilled in order that the facts themselves and not an 'a priori theory' dominate the final outcomes (R. O. Mason et al., 1997, p. 315). To that end, and continuing the researcher participant interaction concept (Principle 3 above), I returned the initial results to the participants to ensure that what was said during the interviews was reported within the correct context and meaning. This process allowed the participants to reflect on what they had said previously and provided them an opportunity to agree or disagree with my assertions. When this was completed, the outcomes were forwarded to selected senior police officers in a number of national and international police agencies to ascertain their views relating to the findings. In addition to senior police officers, the outcomes were forwarded to selected knowledge management academics for the same reasons. This group of people, by default, became my validation group – see Appendix 3. This validation group not only provided advice, encouragement and expertise it also added another dimension of rigour to my research.

## ***VII. The principle of suspicion***

I was conscious of the need to apply scepticism to the interpretation of information from the various different sources to identify false consciousness, defensiveness or lack of authentic reflection. This was achieved by;

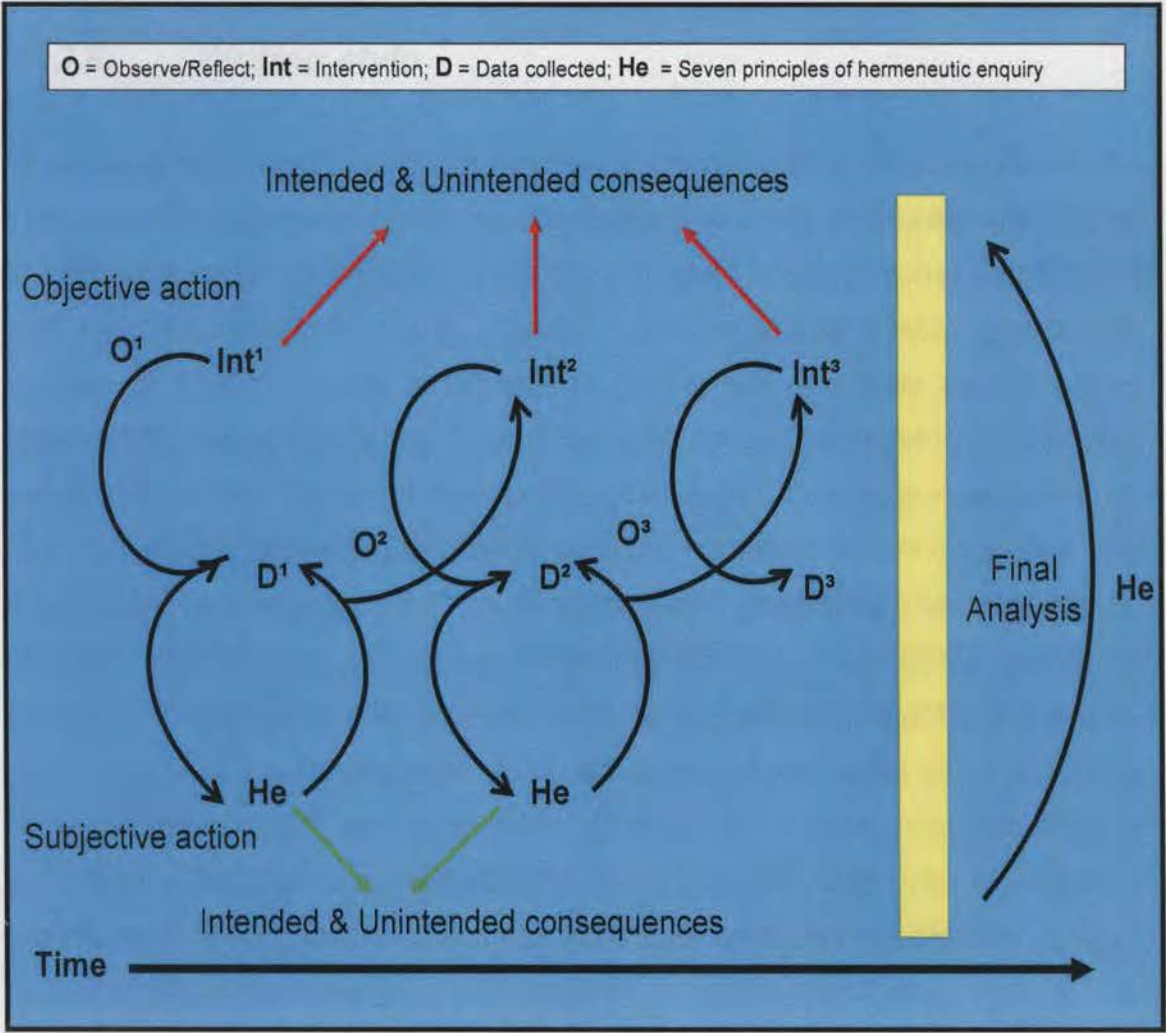
- Matching the view of the subject to the facts
- Checking the view against the views of others
- Examining whether other evidence or behaviour from the subject gave cause to suspect that the subject's views were not genuine.

By applying the above principles, my research was conducted in a manner that ensured rigour, validity and reliability.

### ***3.7. My final research model***

At the start of this chapter I presented a representation of my research approach which I adapted from Dick (1993). This diagram pictorially represented the relationship between the research paradigm, methodology and

data analysis. This illustration was adapted from the literature to demonstrate a structured linear approach to my research methodology. However, reflecting on the above discussion, it can be seen that my research methodology was more dynamic and cyclic. The following diagram better reflects my approach and represents my lived experiences and how I ensured rigour and validity.



**Figure 15 - Action research supported by hermeneutic enquiry**  
 Developed for this research

Having regard to the principles of action research and hermeneutic enquiry, the above diagram illustrates the cyclic nature of my approach and combines the elements of observing the phenomenon, intervention taken to explore a solution and analysis of data using the seven principles of hermeneutic enquiry. While this diagram shows a final resting point, it should be remembered that this is purely shown to address the timeline set for this thesis. Theoretically, since our

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social environment is continually evolving, action research and hermeneutic enquiry argue that any desire to come to a conclusion must be resisted to avoid reducing the capacity to encounter new concerns and uncover fresh puzzles (Ferrance, 2000). It is from this point that I hope others will further explore this phenomenon in similar or different environments.

### **3.8. *Writing style***

The writing style used throughout this thesis incorporates a reflective approach. This approach assists in furthering the readers' and my own understanding of the situation under investigation, through a process of professional insights and self reflection. As mentioned in Chapter 1, this style was encouraged by the writings of McNiff, Lomax & Whitehead (2003) who maintain that in action research the researcher is the core of the research and is therefore about 'your action' and not the 'action of others' – in other words 'first person research' (p. 20). This style is presented through a series of narratives and is consistent with the philosophical approach to DBA research which emphasises a blend of theory, practice, and reflection (Mintzberg & Gosling, 2002; Morley, 2002). Narratives assist in explaining the nature of the relationship between insight and the non-linear nature of the investigation. Such an approach has been given credibility by Richardson (1994) who explained narratives as a useful way "to make a point without tedious documentation" (p. 521) and are also used to evoke, in the reader, a feeling that is as authentic and believable as possible Ellis (1995).

It has been argued that research data can best be analysed if it is seen in narrative terms and such terms provide a way of completing emic research relating to complex business phenomena (Dobson, 2004). Furthermore narration can also act a source of understanding, they can disrupt entrained thinking, they can provide a repository of learning, they can replace user requirement specifications and enable confession of failure without attribution of blame"(Snowden, 2001). Most importantly, the style also allowed me to address the hermeneutic principles within a framework of action research.

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### **3.9.     *Limitations***

As only one police organisation was researched, the results may be best generalised by readers in their own situation and environment. This is appropriate when it is considered that every organisation is unique and that an understanding of organisational practices must be considered within that uniqueness. However, it has been established that the problems of policing in Western Australia are not novel or significantly different from those encountered in other States (Kennedy, 2003).

Lincoln & Guba (1985) argue that the ability to generalise such findings depends upon the transferability of the results to other contexts. They point out that it is incumbent on those who may want to apply the results to other contexts to check whether there is sufficient similarity of the context to have confidence in valid transferability. In line with the hermeneutic enquiry and action research philosophy, this thesis endeavoured to include sufficient contextual information to allow others to interpret the findings from their own research perspective and to make judgement about the transferability of the research findings to similar contexts.

I am employed by the Western Australia Police and, as such, I have both an understanding and a misunderstanding of the phenomena in question (Packer & Addison, 1989). It is possible therefore, that the findings may not be totally free from errors of personal ideologies and perspectives (Kesier, 1994). Some of these errors may include, errors of human prejudice, errors of ego involvement, errors in observation, premature closure of the inquiry and over generalisation (Balnaves & Caputi, 2001). However, I believe that by using the action research framework supported by the hermeneutic principles and circular questioning, this perceived weakness was used as strength rather than a limitation. I make no claim for generalisability beyond these limits.

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### **3.10. Conclusion**

This chapter presented a rationale for the methodology to answer the following research question

*“What lessons can be learned from examining the facilitators and inhibitors to knowledge sharing in intelligence-led crime management within the Western Australian Police?”*

It began with a justification for my choice of an interpretative qualitative paradigm supported by hermeneutic enquiry and underpinned later by an action research case study. Initially my methodological approach was linear; however, reflecting the pursuing discussion in this chapter, a more dynamic model reflective of the action research approach was developed.

Since my study relies on attitudinal perceptions, it may become embroiled in the positivist versus interpretivist paradigm debate. My style of research may also leave me open to criticism for lacking research rigour from researchers grounded in a more scientific approach (Robson, 2002). Nevertheless, it has been well substantiated that for individuals perceptions are reality and that this reality drives behaviours (M. M. Brown & Brudney, 2003). I am also encouraged by the Whitehead's invited article (2004), where he displayed courage and fortitude while faced with termination of employment because of his passion and belief in action research. Williams (2004) also alludes to a similar stance he made that may also have implications. While I do not think I will face a similar situation, I do feel that I might have to defend my approach both at an organisational and academic level. While at the beginning of this research, I may not have been prepared or ready for such a defence - I am now.

The learning outcomes, based on the data and analysis are presented in the next chapter.



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#### 4. Chapter - Learning Outcomes

### Chapter 4 - Learning Outcomes

*Having made a discovery, I shall never see the world as before. My eyes have become different. I have made myself into a person seeing and thinking differently. I have crossed a gap, a heuristic gap that lies between problem and discovery.*

*(M Polanyi, 1975)*

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## 4. Chapter - Learning Outcomes

This chapter presents the learning outcomes of my research. My initial intention was to conduct my research within the context of police officers' individual perspectives. I eventually investigated the phenomenon within three contexts and as such, the analysis is grouped into the three distinct but integrated sections see Figure 16 below:

**Section one** looks at the impact of external and internal forces on organisational knowledge management sharing initiatives over the past ten years on the Western Australia Police. This section was not initially proposed as part of my research. However, feedback from the early focus groups and later suggestions from my validation group indicated that I needed to have an understanding of the context, development and historical momentum of previous organisational knowledge management initiatives (planned or unplanned) prior to my research. It was also suggested that such an understanding would set the contextual scene within which the internal organisational and structural influences on individual knowledge sharing could be analysed.

Using the socio-technical model developed by Pan and Scarbrough (1999), I examined how organisational knowledge management initiatives have been implemented over the past ten years in the West Australia Police. I explored the high level internal and external factors that have impacted the progression of knowledge management strategies.

**Section two** explored the impact of organisational and structural factors on Individual knowledge sharing. This section investigated the specific factors influencing knowledge sharing facilitators and inhibitors within the Western Australia police as determined by individual staff members. Early in the research, I identified 15 factors. Using the Action Research and Hermeneutic cyclic process of reflection, participant discussion and validation group collaboration I distilled this figure to 12 factors and later refined them to my final eight overarching factors.

**Section three** explored the readiness of the Western Australia Police to share knowledge in a distributed environment. It is an example of another unintended section that emerged from the factors uncovered by my research. I found that there was need to develop a system that provided police officers the opportunity and freedom to discuss and share knowledge without the constraints of the current “command and control” management style. As such, a conceptual framework for the development of communities of practice (CoPs) to assist police agencies share knowledge in a global investigative environment was explored.

The diagram below, which was presented in Chapter One, illustrates the flow of my research, from the intended to the suggested and the emerging. The following explanatory text has been added: “The diagram illustrates that the best planned voyages can take unexpected turns and I learned that as a researcher, openness to move with emerging opportunities can lead to more truthful and revealing insights.”

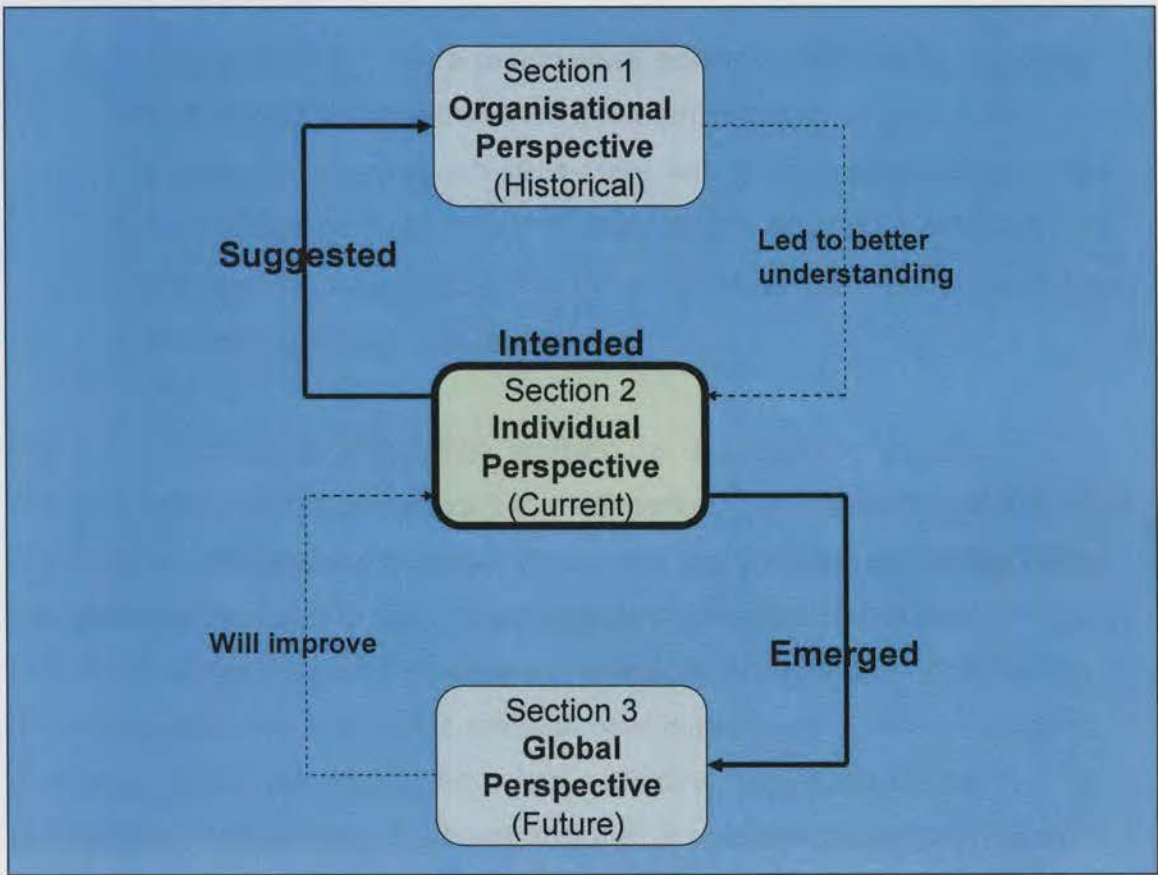


Figure 16 - Flow of categories of research investigation

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## **4.1. Section One - Organisational perspective**

### **4.1.1. Introduction**

To explore the influence of the higher level external and internal factors on knowledge management strategies within the WA Police, I selected three distinct knowledge-epochs and compared them with Pan and Scarbrough's (1999) socio technical model. I use the term knowledge-epoch to refer to a specific timeline where knowledge management, or at least information management, strategies have been evident in the Western Australia Police. The epochs identified cover the time of the previous three Commissioners. I have given a title to each epoch based on what I and others (including my validation group) believe been the vision of each of those commissioners:

- IT Adoption 1989-1994, a period when police officers mainly saw their role as crime fighters rather than crime preventers;
- The Professionalism epoch 1994-1999, which heralded the beginning of major management reform within the Western Australia Police; and the
- Information Management epoch 1999 – 2004, where a primary emphasis on strategic planning was evident.

Observing each epoch in isolation, enabled the description of specific characteristics and factors relevant to each period. The results reveal that there are complex relationships between the internal and external forces that have impacted the evolution of knowledge management within the Western Australia Police. They also indicate that while the police service has been progressing towards an effective knowledge management infrastructure, external factors, especially government policy, have had a constraining impact on the progression. Unless there is a harmonisation of police service strategies and government policies, the development of an intelligence-led or knowledge creation policing philosophy may well be frustrated.

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#### 4.1.2. The Socio-Technical Perspective on Knowledge Management

Pan and Scarbrough (1999) argue that organisational knowledge

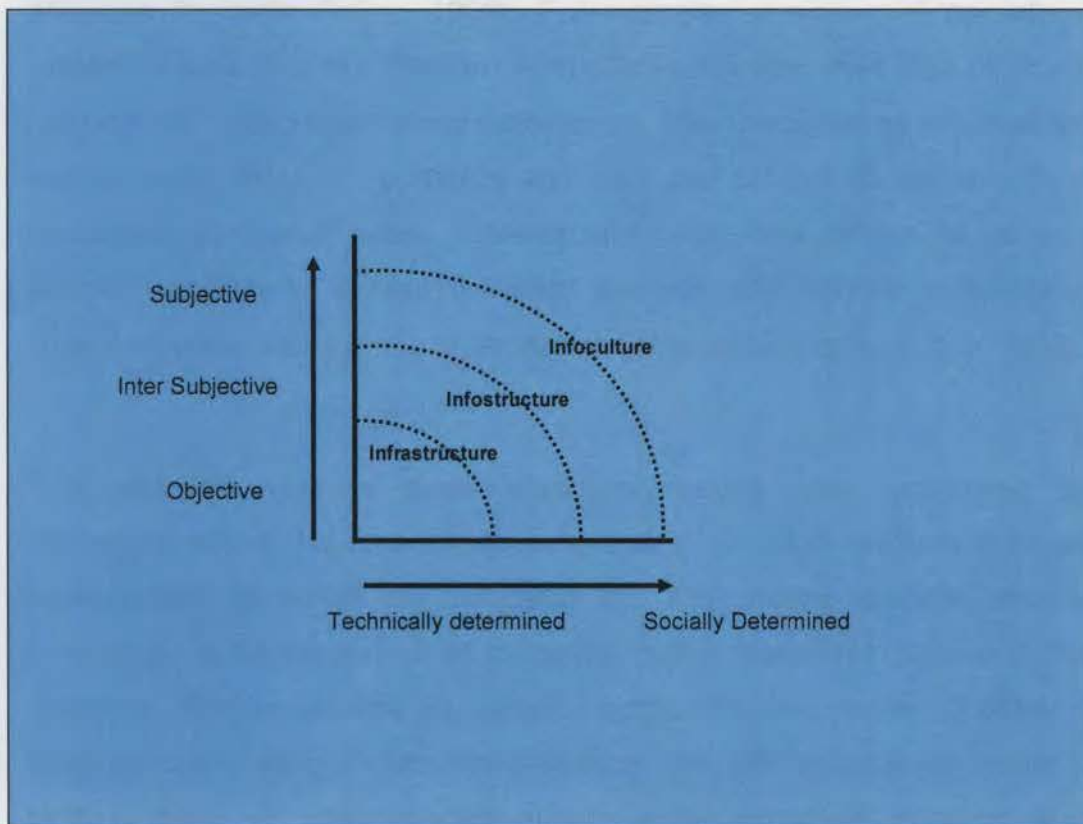
- Is socially constructed,
- Shaped by the emergent interplay between technical and organisational factors, and
- Structured between tacit and explicit forms, and by organisational context (p.363).

According to Pan and Scarbrough's (1999) model, three multi-layered systems with loosely coupled technological, informational and social elements interact over time with each other to determine practical knowledge creation outcomes. The perspectives are explained as follows:

- **Infrastructure** – comprises the hardware and software that enables the physical and communicational contact between network participants;
- **Infostructure** – moves beyond mere technology and incorporates the formal rules governing exchanges and sense making between the participants; and
- **Infoculture** – is the background knowledge embedded in social relations and work group process.

This interplay between social and technical factors is illustrated through the socio-technical perspective model of knowledge management in figure 17 below.





**Figure 17 - The Socio-Technical Perspective on Knowledge Management**  
Source Pan and Scarbrough (1999).

### 4.1.3. Explanation of the knowledge epochs

#### 4.1.3.1. IT Adoption

This period relates to the five-year period 1989 - 1994, and typifies the image of police officers who saw their role as crime fighters rather than crime preventers (Sarre, 1997). This approach to policing was cultivated by the management style of the time which was heavily weighted towards a paramilitary philosophy of management with an emphasis on strict discipline, autocratic command, centralised decision making and a multiplicity of ranks (Etter, 1993). Such a style encouraged knowledge as being seen as a source of power, causing units to hoard information and become silos (Western Australia Police, 1998).



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Most knowledge was tacit in nature and what was codified tended to be in systems that were antiquated and inadequate in addressing corporate needs (Western Australia Police, 1999). For example, a review of the information systems found that the Western Australia Police had over 800 different data repositories. These information repositories, also described as information silos, existed within individual portfolios and units and catered for the specific needs of specific functional areas. Consequently decisions tended to be portfolio-centric, were made without sufficient analysis and without considering their impact on other areas of the organisation (Western Australia Police, 1998).

This lack of evidence based decision making was recognised by the Commissioner at the time, Brian Bull, and in an effort towards a knowledge management approach he instigated the first moves towards encouraging universities to become involved in applied police research initiatives in Western Australia. This epoch also witnessed a comprehensive review of public sector finances culminating in recommendations that can now be regarded as the starting point for contemporary public sector reform in Western Australia. Included in this report was the observation that in order for the Police Service to provide a greater police presence, improved support facilities were urgently needed (McCarrey, 1993a, p. 185).

This era, when analysed against the Socio Technical model, indicates that IT infrastructure including hardware and software was not utilised in a symmetrical way to effectively enable the physical and communicational contact between network participants. When analysed against the Socio Technical model, weaknesses are revealed in the police approach.

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#### **4.1.3.2. Professionalism Program (Delta program)**

In June 1994, a new CEO, Commissioner Bob Falconer further enhanced knowledge management initiatives. Commissioner Falconer's arrival heralded the beginning of major management reform within the Western Australia Police. He believed that accessible information was one of most important assets of the police service, without which it could not meet its mission nor perform any of its core functions and that information should be accessible and shared at all levels. This was described to me by a senior officer who worked closely with him at the time:

*"The underlying rationale was to enhance decision making at all levels by providing better quality, more relevant and more timely information to be delivered to the right people at the right time".*

In addition he further encouraged the participation of universities in the move towards evidence based policy decision making within the policing environment.

Another fundamental initiative was his buy-in of 'knowledge creators' or 'knowledge agents' across many portfolios. This buy-in of knowledge creators included financial analysts, business analysts, human resource analysts and intelligence analysts. In the crime management area, unsworn crime analysts were introduced with a specific function to create knowledge by analysing information gathered by operational officers and provide an intelligence (knowledge) product to better inform decision makers. Having regard to the IT investment and the buy-in of knowledge creators the police service was strategically elevating its performance within the *Infostructure* dimension of the socio-technical model with some improvements within the Infoculture.

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#### 4.1.3.3. Information Management (Strategic Planning)

After the retirement of Commissioner Falconer in 1999, the knowledge management initiatives introduced during the Professionalism Program continued to be supported by the new Commissioner Barry Matthews, through his Strategic Reform Program. The primary emphasis of this period was on strategic planning. This new approach, probably would have witnessed the organisation strengthening the *Infoculture* perspective of the socio-technical model. However some internal and external influences prevented this shift and some believe that these influences caused the knowledge management initiatives to regress. For example, while Commissioner Falconer's investment in information technology was necessary, one outcome was that managers began to rely heavily on the assistance of technology to provide solutions to problems (Western Australia Police, 1998). This resulted in Commissioner Matthews being faced with a strong push towards information technology and with many within the service equating knowledge with technology. Consequently this saw many of the new knowledge agents being utilised to provide superficial and retrospective crime statistics data at the expense of new knowledge creation. This situation is characteristic of many organisations who tend to be more focussed on IT (Kautz & Thaysen, 2001) at the expense of knowledge agents (Boisot, 1998). A crime analyst in a district office supports this point:

*My district cannot keep up with the level of crime. But instead of having me analyse [serendipitous] pieces of information that might give investigators some help in targeting the crims, I am forever producing colourful reports relating to what was instead of what could be. One of the main reasons I do this is because I can. So can the 'level 1' customer service officer but they are not asked to do that because it is not in their job description. If we employed more support staff that could use some of the database packages maybe I could get back to doing what I should be doing – creating intelligence*

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Another reason for this shift is the implementation of Government policy. An examination of the State Government's crime reduction policies, at that time, indicate that their key crime initiative is to make Western Australians feel safe in their homes and in their community (Labor Government, 2001). While this is a laudable initiative, the strategy was predominately based on recruiting 250 more police officers in over the four-year period 2001-2005. They continued this approach more recently by promising an extra 350 over the period 2005-2009.

Evidence relating to the impact of police numbers on reducing crime rates is rather mixed, with some researchers suggesting that more police on patrols will not reduce crime see for example, Edwards (1999), Mulgan (2003) and Normandeau (1993). Equally there are others who maintain an increase in police numbers has a direct impact on the reduction of certain offences especially anti-social behaviour, see for example Marvell & Moody (1996) and Sherman et al (1998). This debate relating to effectiveness of police patrols on the reduction of crime will remain for some time and a definitive answer will probably not be forthcoming soon. What is obvious though is that the constant appeal by police managers, police unions, the media and the public, for more police officers is not practicable considering the expense. It has been estimated that the cost of recruiting and training 1000 police officers is approximately between \$70 – 80M (Weatherburn, 2002; Western Australia Police, 2005).

The impact of the government policy is captured in the comments below by a senior manager:

*...what Commissioner Matthews endeavoured to do was to move from the Professionalism philosophy away from all the information, right away and everywhere, to ensuring the right information at the right time in the right place. However current government policy of reducing unsworn officers appears to have put a stop to any moves Commissioner Matthews may have wanted to make in order to improve intelligence management within the police.*

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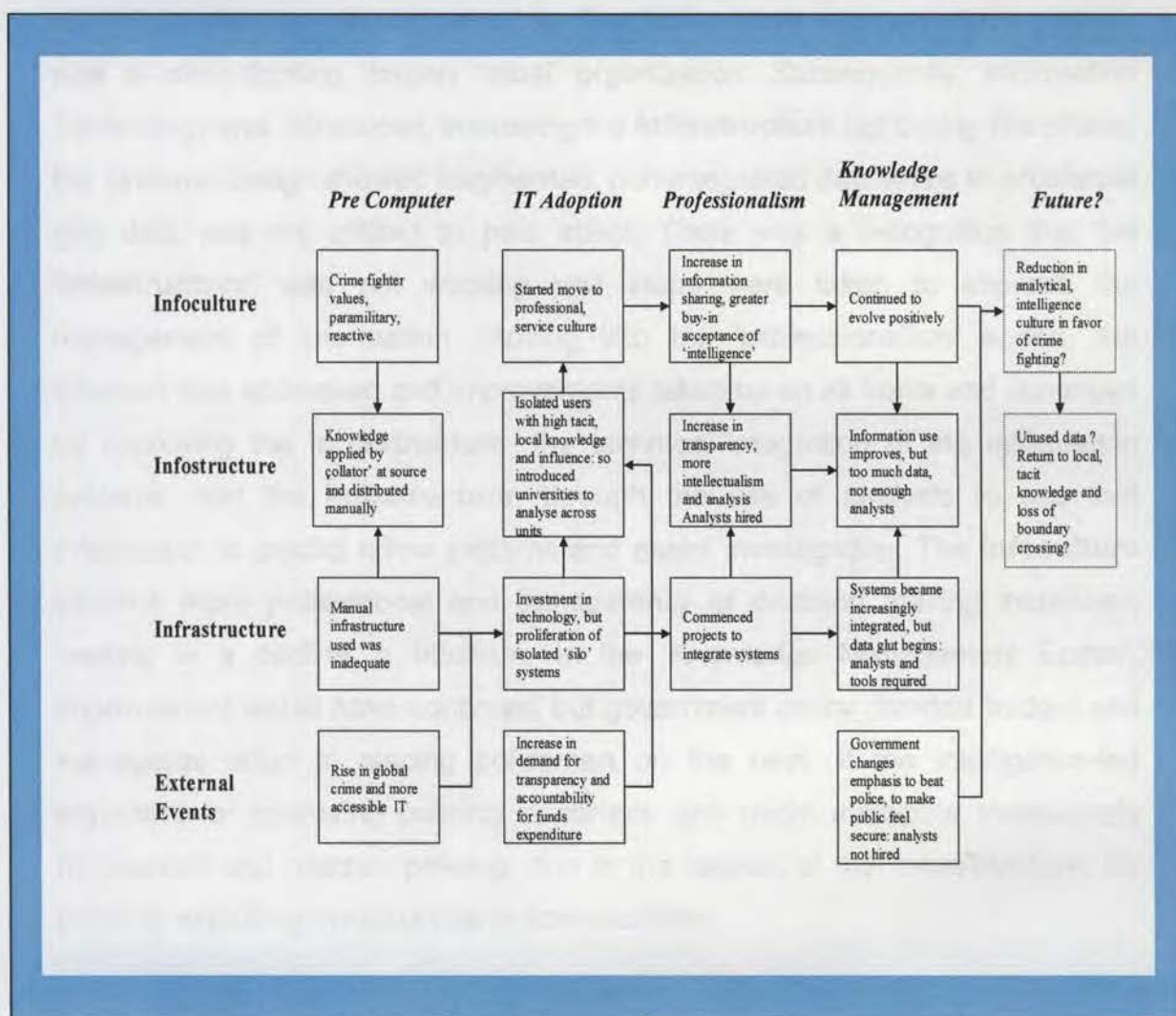
It can be argued that the 'increase operational resources' approach to policing is rather simplistic. It is akin to the previously discussed "riverbank" analogy where the government is prepared to throw more officers into the river in an attempt to save those drowning, but may be better served by going up stream to see why so many are falling in. A reflection of the continual reliance on increasing police numbers at the expense of knowledge creators can be seen from the fact that approximately 24 per cent of recorded crimes are detected, and only nine per cent of these detections result in a conviction at court (Home Office, 2001). It goes without saying that if a private business could only deliver nine per cent of its product or expected services; it would not last for too long. Policing is no different.

One way to improve police outcomes is through enhanced effectiveness and efficiency in the use and management of physical assets and human resources and the support and flexibility it needs to deliver a first class service to the public (Froyland & Bell, 1996). However, efficiency initiatives must be driven by evidence based strategies. Evidence based strategies require knowledge and knowledge needs to be created, therefore the need for knowledge creators.

It can also be argued, that the Government's investment in recruiting extra police officers, and its continued investment in IT tends to be at the expense of knowledge creators who are essentially unsworn public servants. For example, over the six year period 1997-2003 the police service received no funding to increase unsworn positions. This lack of funding for public servants was acknowledged by Commissioner Matthews who stated, "we [the police service] are not funded to increase the number of unsworn officers" (Western Australian Parliamentary Debates Legislative Council - Estimates Committee, 5 June 2003, p. E641). This was put into perspective by an operational officer who maintained that:

*“...without the means to create appropriate intelligence products, police officers will continue to be utilised in a vacuum. Later on public dissatisfaction in police will become another political platform and competing parties will promise more police resources in the form of more police officers. We [the police service] continue on as we did before and keep on feeding the monster”*

The diagram below maps the relationships between the internal and external forces that have impacted the evolution of knowledge management within the Western Australia Police over the past ten years.



**Figure 18 – Mapping knowledge strategies in WA Police**

Developed for this research later published as a paper (Hughes & Jackson, 2005)



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#### 4.1.3.4. Discussion

It can be seen from the above map that there are complex relationships between the internal and external forces that have impacted the evolution of knowledge management within the Western Australia Police. Through observing each epoch in isolation, I can explain and describe specific characteristics and factors relevant to each period. This leads to a better understanding of the interplay across each of the socio-technical categories.

In the pre-computer epoch, the **Infostructure** of pre-computerised policing applied intelligence and created knowledge at the point of data capture by an experienced operative. The **Infrastructure** was inadequate for sharing and using it to effectively to combat crime. The **Infoculture** was one where policing was a crime-fighting, largely 'tribal' organization. Subsequently, Information Technology was introduced, improving the **Infrastructure** but during this phase, the systems design allowed fragmented, non-integrated databases to proliferate and data was not utilized to best effect. There was a recognition that the '**Infostructure**' was not working and steps were taken to improve the management of information. Moving into the 'professionalism' epoch, the situation was addressed and improvements taken up on all fronts and continued by improving the **Infrastructure**, the technical integration of the information systems, and the **Infostructure**, through the use of analysts to use that information to predict crime patterns and assist investigation. The **Infoculture** became more professional and transparency of decision making increased, leading to a decline in tribalism. In the 'Knowledge Management Epoch', improvement would have continued but government policy diverted budget and managerial effort to placing policemen on the beat. If the intelligence-led argument for improving policing is correct, one might anticipate increasingly fragmented and reactive policing, due to the neglect of the '**infostructure**' for properly exploiting the data that is now available.

#### 4.1.4. Conclusion

This section explored the influence of technical, social and structural factors on the effective use of information in the Western Australia Police. It highlighted the

complex relationships between the internal and external forces that have impacted the evolution of knowledge management within the Western Australia Police. It established that while the police has been progressing towards an effective knowledge management infrastructure, external factors especially government policies have had a constraining impact on the progression. An analysis of the progression in relation to the Socio-Technical model indicates that the police service has not progressed, any further than it was during the Professionalism-epoch. If Government policy relating to increasing police officers without an appropriate knowledge creation infrastructure continues, the situation in relation to knowledge management improvement within the police service does not augur well for the future of intelligence/knowledge led policing. This assertion, however should not be taken as an indictment on government policy implementation, rather it should be seen as an acknowledgement of Mulgan's (2003) argument that there are inherent complexities at work, which derive both from the nature of government, itself and its duty to create public value.

It would seem that the management of knowledge creation within police organisations and the move towards a supportive Infoculture and Infostructure cannot be sustained if external and contradictory influences such as government election commitments are dominant. There is a need for harmonisation of police service strategy and government policy, otherwise development of an intelligence-led or knowledge creation policing philosophy may well be frustrated.

<div><input type="checkbox"/></div> <div><b>Self Reflection and insight</b></div>	<p>This exploration also helped me understand the historical influences of some of my findings which will be discussed in detail in the next section. For example, in relation to new public management which would appear to be a relatively new approach it shows that this has roots in history. It provides insight into how government policies to recruit and remunerate sworn police officers can lead to a divide between police officer and public servants. It also provides context to the continual IT investment in policing.</p> <p>It proved extremely beneficial for the action part of this research. I presented the outcomes to the A/Executive Director. He was concerned about the continuation of a lack of funding for public service staff. He advised me to prepare a business case outlining the costs and benefits of recruiting additional public service staff. Armed with the knowledge from this exploration I prepared a case which was presented to Government. Treasury agreed to provide funding for the first time in six years for an</p>
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The next section presents the views of individual staff members relating to what they perceive as the main inhibitors and facilitators to knowledge sharing.

## **4.2. Individual Perspective**

In the previous section, I investigated the relationships between internal and external social, technical and political forces that have impacted the evolution of knowledge management strategies (planned or unplanned) within the Western Australia Police from the higher organisational perspective over the past ten years.

However, since organisations are systems made up of individual members willing to work together to achieve common goals (Pace & Faules, 1994) it is important to have an understanding of the role, perceptions, and influences these individuals have in the knowledge management and sharing process. To that end, this section presents the views of internal staff members relating to what they perceive as the main inhibitors and facilitators to knowledge sharing.

### **4.2.1. Introduction**

The outcomes in this section indicate that the concept of knowledge sharing operates in a highly complex ecology. As discussed in the methodology chapter, the data collected for this section is not claimed as pure data. It is presented as 'living social texts' (Thomas & Davis, 2002) recognising the fluidity and meaning ascribed to knowledge sharing by police employees. It is incumbent on readers to read the data within that context. A detailed discussing of the findings is presented in Chapter 5.

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As is the case with many issues to do with policing, it is difficult to examine matters in isolation, as many factors overlap (Kennedy, 2003). Therefore, at the end of each finding I have presented a diagram to illustrate the relationship between the factors involved. A final diagram combines these relationships and gives an overview of the complexities involved in facilitating knowledge sharing. This approach is loosely based on the outcome modelling tool used by Fujitsu Consulting (Thorp, 1998). It builds a simple but insightful series of outcome linkages to allow agencies map the intricacies involved in the relationships. Not only does this systematic approach help in identifying the cause of knowledge sharing gaps, it also creates greater basis for understanding and leveraging organisational sharing efforts (Zack, 1999a, p. 129). The danger of this approach however, is that because it presents a sense of clarity and cause and effect for each factor, it may be interpreted by readers that solutions may be achieved by dealing with each factor individually. However, I will show in this section that such an approach cannot be taken. Nevertheless, each presentation is a starting point for future-reaching business improvement reviews

#### **4.2.2. Individual Findings**

As mentioned previously, the first cycle of my analysis revealed 15 factors inhibiting or facilitating knowledge sharing in the Western Australia Police. I later distilled these to 12 factors, which I finally refined to end up with my final eight overarching factors. Table 8 below gives an overview of the progression from my initial 15 factors to my final eight. The progression from 15 factors to the final eight evolved through a cyclic process of hermeneutic abstraction. The first 15 factors were developed with the 'Mind Manager' software program directly from my interviews. As I presented these findings to my validation group, and discussed them with staff members a number of suggestions were made to the effect that some of the factors were similar. For example factors number 4, 5, and 6 (highlighted in green) were deemed to relate to qualifications and adequately covered under one umbrella of 'qualification non qualification divide'. A similar outcome occurred for the factors highlighted aqua and mustard in the text.

**Table 12 – Progression from 15 to final eight factors**

Cycle One (15)	Cycle Two (12)	Cycle Three (8)
Promotion system –‘we to I’	Promotion system – ‘we to I’	Promotion system –‘we to I’
Sworn versus unsworn divide	Sworn versus unsworn divide	Sworn versus unsworn divide
Nature of the beast	Nature of the beast	Nature of the beast
Different skills between sworn and unsworn	Inequity relating to skills	Qualification and non qualification divide
Little recognition of completion of tertiary education courses	Little recognition of completion of tertiary education courses	
Recruiting officers with degrees		
Training courses	Training courses	Training courses
External oversighting	External oversighting	Influence of command and control management style
Commitment to agency	Micro management	
Micro management		
Subservience to rank	Subservience to rank	
Risk Averse agency		
IT- Driven rather than IT- led	IT- Driven rather than IT- led	IT- Driven rather than IT- led
Managerialism (New Public Management)	Managerialism (New Public Management)	Managerialism (New Public Management)
Decentralisation	Decentralisation	

The following table presents a brief overview of the eight factors which finally emerged from this research (cycle three):



**Table 13 - Factors facilitating or inhibiting knowledge sharing**

	<b>Factor</b>		<b>Facilitator / inhibitor</b>
1	Promotion system – 'we to I'	Inhibitor	Behavioural interviews continue to concentrate on individual knowledge rather than creating and sharing within teams
2	Sworn versus unsworn divide	Inhibitor	Integrated workforce between sworn officers and public sector staff has not as yet materialised.
3	Nature of the beast	Inhibitor Facilitator	Police officers are by nature sceptical of outsiders. This suspicion extends to public service staff. However, sharing can occur when police officers believe public service staff can value-add their outputs.
4	Qualification and non qualification divide -	Inhibitor	Qualified public service employees leave the service due to sworn police officers holding positions based solely on rank rather than skills and competencies. Police officers also felt unrewarded for their educational effort, were more likely to be dissatisfied with the job and under stimulated by the work. They want to be promoted quickly and get involved early in the promotion race otherwise they tend to move on to other employment fields.
5	Influence of command and control management style	Inhibitor	Police officers are trained to be subservient to rank, as such; innovation can be stifled. Leads to micro management style where socialising is not encouraged and therefore sharing of knowledge reduced. Focus of knowledge requirements change with promotion.
6	Managerialism (New Public Management)	Inhibitor	Managers are forced to dismantle frontline positions to cater for government reporting expectations. Takes officers away from the community thereby reducing their intelligence gathering capacity. Decentralisation of districts promotes a "patch mentality". External organisation oversight leads to risk adverse policies and practices.
7	IT- is driven business rather than business driving IT	Inhibitor	IT has become omnipresent in the organisation but it has been described as 'conceptually elegant but functionally restrictive', as such officers find it ironic that they spend much time inputting data but find it difficult to access the information.
8	Training courses	Facilitator	Allows staff to meet in informal settings and exchange knowledge.



4.2.2.1. Promotion System - We to I paradox

The most commonly stated factor, deemed to have an inhibiting impact on knowledge sharing, is related to the promotion system. It was continually stated that an over reliance on behavioural interviewing techniques, at the expense of exploring police officers' interaction within teams, is the main reason police officers do not share knowledge. The following interview extract is reflective of the situation for which I have coined the phrase the "We to I" paradox.

*"It is hard to believe that from day one at the academy we are told we need to rely on each other and that no man is an island. We are trained to operate as buddies and work in teams; in fact, the union and occupational health and safety legislation have it so that we cannot go out on our own. Detectives work in teams on operations which have a number of diverse staff including support staff, investigators analysts and other centralised support such as forensics. It beats me then why I have never been asked when I shared information and what was the result of such sharing with the team. This promotes an environment where officers are looking for the big individual catch and at times hold onto information that might help another colleague in case that information might reduce his (sic) chances [officer in possession of information/knowledge] of making the big catch and impede his (sic) promotion".*

<div><input type="checkbox"/></div> <div><b>Self Reflection and insight</b></div> <div><b>We to I</b></div>	<p>The comments above reflect to the sentiments of many of the participants to whom I spoke. I interviewed this investigator at a restaurant. We had a coffee and we spoke generally about policing and other related matters. Having worked with this officer, I would call him an excellent investigator and this assumption has been reinforced by many other officers who worked with him.</p> <p>My experience is that his ability to leverage knowledge from other officers inside and outside his team is one of his greatest traits. I also know that he acknowledges the fact that he relies on the team and as such, at interviews, finds it difficult to refer to what "I" did instead tending to refer to what "we" did. He told me that on two occasions when receiving feedback from his interview panel members, he was told that he failed to concentrate on the "what I did". This was the case with most of the officers I spoke with – even those who had been promoted. If this is the case, I wonder how many other good investigators are not successful at interviews for this reason? Furthermore how many hold on to information in order to address the "I" criteria?</p>
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The following figure maps the process by giving a broad overview of the factors and timeline involved. It shows that early in their career, police officers are inclined to share knowledge but having being exposed to the promotion system, knowledge sharing is reduced.

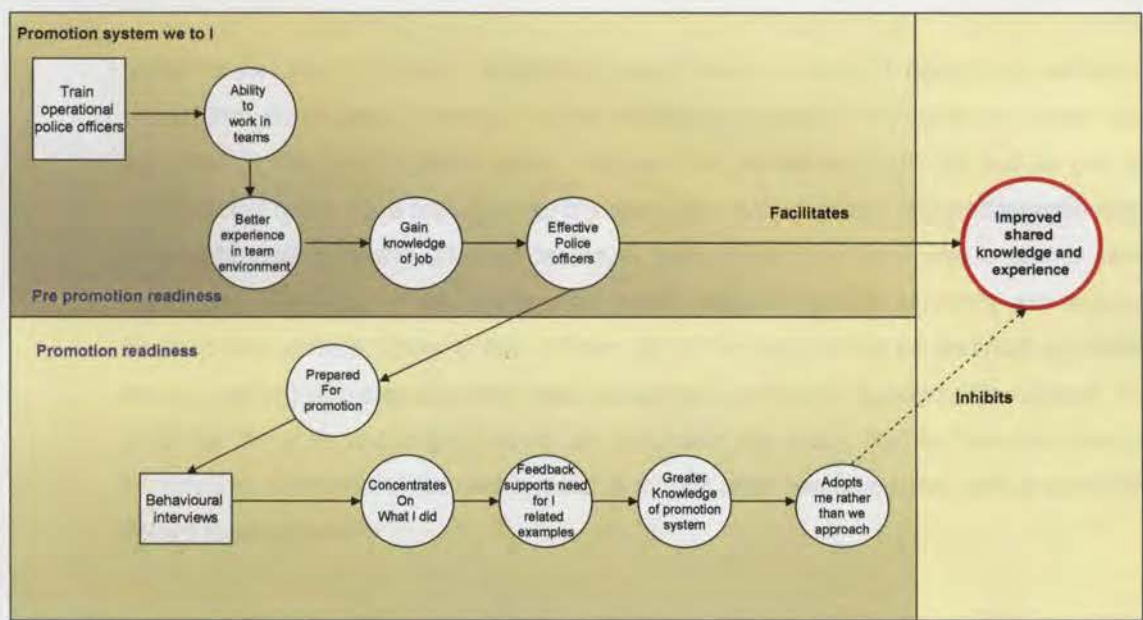


Figure 19 - Promotion system – we to I outcome map

**4.2.2.2. Sworn versus unsworn divide**

In all Australian Police organisations, there are two types of employees - police officers and police staff. Police officers have taken an oath to enforce the law of the state and as such are colloquially referred to as 'sworn members' or 'blue shirts'. On the other hand, police staff (public servants) who have not taken an oath and do not have police powers of arrest. Colloquially these staff members are referred to as 'unsworn members' or 'white shirts'.

A compelling inhibitor arising from the research is the alleged divide between police officers and public service staff, especially those who do similar functions. This situation is succinctly explained by the following public service crime analyst who conducts criminal profiles on specific offenders as one of her core duties. Whenever she required information that was not available on the computer, she would have to ring sworn police officers who were familiar with the case or the offender. However, on a number of occasions, when she rang

these officers, she was asked questions such as "Are you a sworn officer?" "What rank are you?", "Why do you want it?" or "Have you got permission to have access to this data. The fact that this public servant had 'Secret' Level classification, which was a higher information access classification than the officers she had contacted, made no difference. As she maintained:

*"What is the point of been classified to secret level when all I need is a uniform? I accept that these type questions can be expected especially if they do not know you, but what is the point if even after I answer the questions I still do not to get the information I need. As a test, I asked my colleague XX [xx sworn officer doing the exact same job] to ring for me. This officer never gets asked what rank she is and is never asked why she requires the information. While unsworn [public servants] are required by the police service, many police officers still do not appreciate us and feel we should be only dealing with claiming their meal allowances and other support office duties. This gives me the shits and at as a result I do not share with them. Rather than ask them for information, I am more inclined to take a longer time searching the data base which delays the outcome.*

<div><input type="checkbox"/></div> <div><b>Self Reflection and insight</b></div> <div><b>Sworn v unsworn</b></div>	It can be seen from the above example, how easy it is for a cycle of non sharing of knowledge to be established. I notice from my experience that this is the case especially within crime units. For instance, I worked very closely with public servants in crime units who requested information mainly from sworn officers. Even though these requests would benefit an investigation, the civilian staff had greater difficulty, than did sworn officers, in obtaining such information. Therefore, it was (and still is) easier to ask the sworn members to make the request. Apart for acting as an inhibitor to knowledge sharing, it also acts as an argument to keep sworn officers in positions that could be easily conducted by civilian staff. This in turn reduces the number of officers available for operational duties. The strongest example of the sworn v unsworn divide was captured in a comment made to me by a mid ranking officer who said "the only reason you [public servants] exist is because we [police officers] exist".
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The following comments, from three crime analysts are more examples given to me supporting a divide between police officers and public service staff and how such a divide can influence the sharing of knowledge.

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I have been a crime analyst since they were introduced during the Delta program. I was with the Federal Police before that as an intelligence analyst where I learned my skills. I joined the WA police because I wanted to stay in Perth being employed by a federal agency there was always the chance to be moved. When I joined the WAPOL, I was appointed as a Crime Analyst. I found out that those who I was working with were blue shirts (sworn police officers) and getting more money than I was and also had a different title - Intelligence Analysts. In some cases, the remuneration difference was up to \$15,000, even though I was the most qualified and experienced in the unit. Because they were sworn they were called Intelligence Analysts, because we were unsworn we were called Crime Analysts. This was a not a problem at first until they [sworn officers] were moved because of tenure and I had to train the new incumbents, who in many cases, were appointed because of their rank rather than skills

I have come to believe over the years working here blue shirts who come into this office only do so to get off the street and they tend to be either lazy or not very interested in policing. For many of them the position is a means to an end, not something they really want to do. On top of that I see them getting promoted out of these positions –but the white shirts get nowhere as the promotional opportunities in the Intel [intelligence] sections are only for the blue shirts.

Vince, do not get me wrong, I am not complaining about my job, in fact, I love what I do and, to be fair, the sworn officers I work with in the main are great fun. I just get a bit peeved to think that when my neighbour's house was burgled there were no police officers to attend. Because she knew I worked for the police, she complained to me. When I mentioned it back at the unit, the sworn officers replied – yes, that's the case out there; there is no one to do the work. One officer jokingly said yes we are all in here. That got me thinking about the whole situation. I looked around the office and I counted 15 constables who work a 40 hour week with a paid 45 min break included, therefore in real terms they work only thirty six and a quarter hours per week and get paid over \$60,000. I work officially thirty seven and a half hours per week but I must take an unpaid meal break of one half hour which takes my day to forty hours in real time spent at the office. Do you know the last two Level 6 public servant positions were given to sworn officers? You can imagine that most of the public servants who applied were peeved". Why would I want to burst my guts and create knowledge and then share it with those who do not deserve it? No Vince I have made up my mind I work on my jobs and any knowledge I create is mine and only shared when I know I will get the credit.

<div data-bbox="209 230 231 256">□</div> <div data-bbox="209 296 368 499"> <b>Self Reflection and insight</b> </div> <div data-bbox="209 606 332 694"> <b>Sworn v unsworn</b> </div>	<p data-bbox="402 223 1325 902"> <i>When I interviewed AD, I was unsure about taking his remarks at face value. As a result, I made further enquiries from a number of different sources. In relation to the promotion positions mentioned, AD is correct those positions were won by serving police officers who then transferred across to the public sector. I see no problem with this especially if the best person wins the position. However, this also adds to the inequity already mentioned by other respondents, in that sworn officers are allowed to have two bites of the promotion cake. For example, they can apply for sworn and unsworn positions. Whereas, public servants are not allowed to apply for sworn positions, even if the position does not require the use of powers of arrest. In many cases, these officers also take leave without pay or long service leave and hold the sworn positions open just in case they do not like the new position. This practice however, reduces the number of police officers available for work and supports AD's assertion about the lack of operational service.</i> </p> <p data-bbox="402 997 1325 1535"> <i>Since conducting these interviews, three unworn analysts have left the organisation, I spoke to a number of senior officers regarding this situation and each of them told me that this situation was causing some concern not only among the public service staff but also with police officers who felt that the police service could not afford to lose qualified and competent analysts. However, one month later when one of the vacant analyst positions (caused by the recent departure of analysts) was temporally advertised as an expression of interest, it was filled by a police officer. This situation is concerning since expressions of interest for public service staff are designed to give employees an opportunity for self development through actual job experience and hopefully as a result they will be competitive to apply for the position when it is advertised.</i> </p> <p data-bbox="402 1630 1325 1844"> <i>This problem has been discussed at length with the new Commissioner and he has introduced a new Front Line First philosophy, where police officers must be returned to front line duties. I was involved in the early discussions with the Commissioner, during my time at the Reform Team. The findings from this research proved very beneficial during those discussions.</i> </p>
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From the figure below, it can be seen that there is a need for the police service to address this divide between sworn and unsworn before it becomes such a divide that any attempts to reduce the gap will become too difficult.

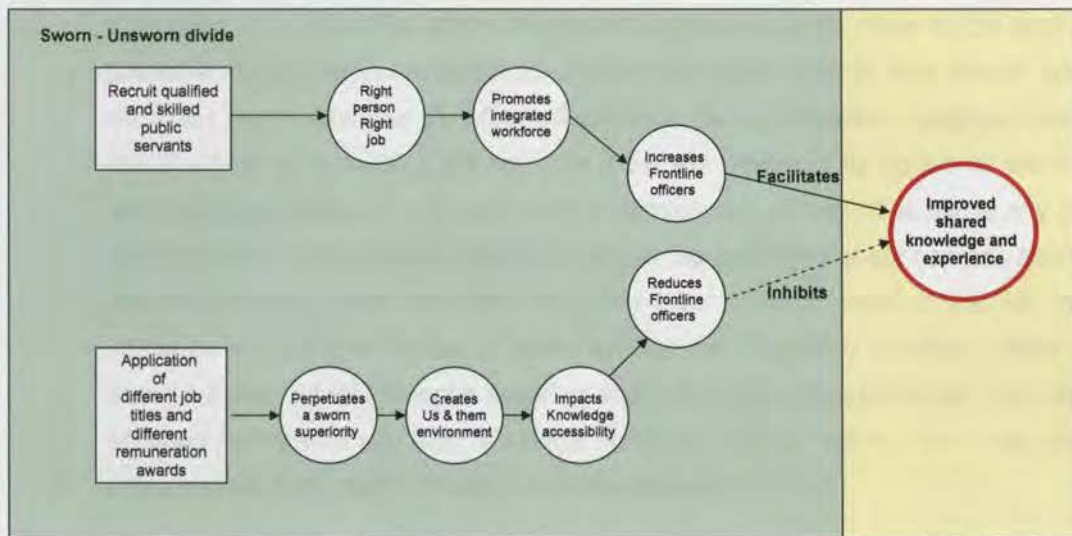


Figure 20 - Sworn unsworn divide

#### 4.2.2.3. Suspicion, scepticism and mistrust – ‘Nature of the beast’

In my quest to explore further, the divide between public servants and police officers, I presented my findings to a number of senior detectives. The findings generated robust discussion and also unearthed other factors. For example, they pointed out to me that a core function of police officers is to investigate crime. To do this successfully, police officers tend to build what they call a ‘knowledge fence’ around a suspect and as they receive more information and create more knowledge about the offence and suspect, they begin to tighten the fence until the suspect can do nothing else but tell the truth. It was said that as a consequence, police officers open all avenues to create knowledge, but close all avenues when it comes to sharing what they have created – unless the disclosure is deemed to improve the matter under investigation. I presented these comments to other detectives who said:

*It is the nature of the beast; we are sceptical and suspicious by nature. We are selected because we tend to have such traits and the need for such traits is reinforced in our training and on the job experience. I suppose you could say it is systemic in policing especially since most police officers have been involved in investigations at some*



stage. You could say that the creation of knowledge is in direct proportion to the tightening of the knowledge fence. Any knowledge released unnecessarily or accidentally can be detrimental to the case under investigation. Sometimes this is reflected in how we deal with people in our personal lives including our family members.

I suppose it is akin to a poker player who holds his cards close to his (sic) chest. Likewise, detectives or investigators holds their cards close to their chests and only discloses information that they feel will enhance the investigation. I suppose you could call it a type of survival. I am not sure if we are sceptical by nature or we become sceptical by experience – it is probably a combination of both. It is fair to say though, that this trait, no matter how insignificant it is at the beginning of our careers, becomes a learned behaviour over time and transports itself to other areas of the job. What is useful in one situation probably works against me in another situation. When I think about it, I even do that [adopt a sceptical and suspicious nature] at home. I am regularly accused by my wife and kids of always acting as a police officer. Now I can see why those outside [non police officers] have that perception of us

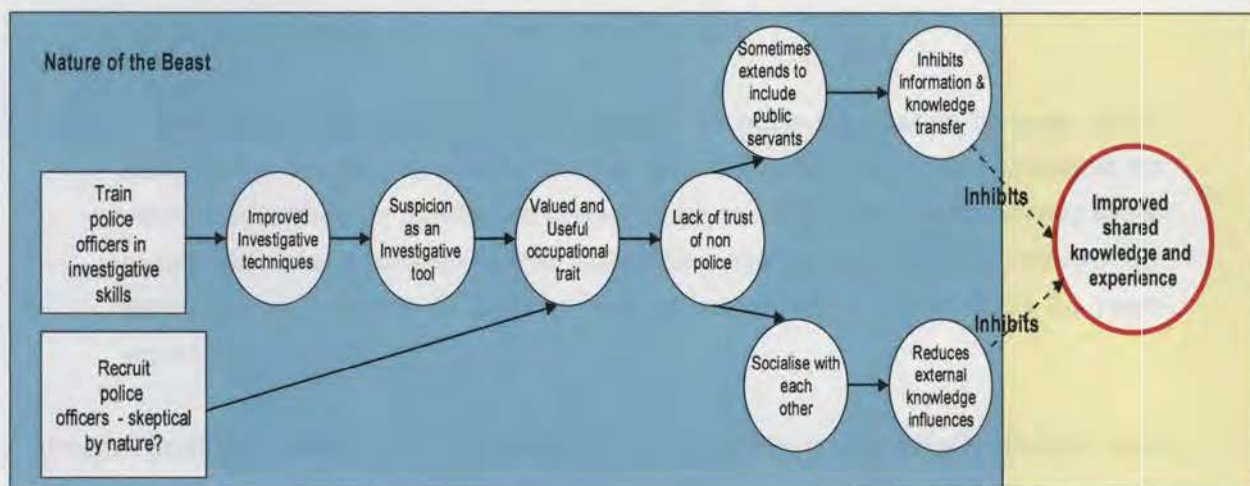
<p><b>Self Reflection and insight</b></p> <p><b>Nature of the beast</b></p> <p>✍</p>	<p>I agree that police officers are sceptical of outsiders and at times, they have cause to be. However, a major concern of many public service employees interviewed is that police officers do not trust them and as such do not share knowledge. Having regard to the detectives' comments, it appears that this suspicion can extend to family members and friends and therefore public service staff working with police officers may also feel the negative aspects of that trait. I believe that the analogy of the gun belt used by Caplan (2003) to describe police cynicism says it all. I have replaced the term cynicism with suspicion:</p> <p>[Suspicion] is a tool that comes with the uniform. It has a proper place on a duty belt, but when the belt comes off [suspicion] must follow. As with any other police tool, such as a gun, if used inappropriately [suspicion] can lead to disaster.</p> <p>However, it is my experience that knowledge sharing does occur between police officers and public service employees in appropriate circumstances. The sharing is most obvious when police officers believe public service staff can value-add police operational outputs. It has been said to me during this research and other work related projects that the functions of public service staff appear to be placing more demands on operational police time. For example, the police service employed public sector staff to work in its strategic and</p>
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*business portfolios to develop organisational business and strategic plans. However, operational police units still have to develop their own individual business plans.*

*This causes much disquiet among police officers who rightly point out that even though over the past five years the organisation has increased its support staff, operational units are doing more administration tasks.*

*I asked the planning unit as to why they do not visit the police operational units concerned to collect the required information and then write the plans. The response was that 'it is pointless' as operational officers would not have any understanding of the business planning concept and how it feeds into the strategic planning process. This comment may be true, but members of the public believe that police administrators are doing such work and that police officers are actually policing. From my time conducting community consultations into what the public value from police, I was made very aware that community members do not care for one moment if Constable Brown or Sergeant Smith understands the police service's business planning process- they want them to police. Based on my time in policing, on both sides of the sworn unsworn divide, I believe that knowledge sharing is two- way street. Police officers should be aware that public service employees perform an important function within the police service. But if public service employees want to be more involved in the knowledge sharing process, they must begin to implement strategies that will value-add both corporate and operational policing activities. In other words - do the administration work so that the police can get on with policing.*

*I have since presented this outcome to the new Director Performance Management who later became a member of my validation group. He was interested in the outcomes and has put in place a system where his unit will meet with each operational area prior to the development of their business plans to discuss problems and provide solutions. His unit will also provide a number of templates which will assist in the development of the plans and take a more consultancy approach rather than a demanding approach*



**Figure 21 - Nature of the beast**

#### **4.2.2.4. Qualification and non Qualification divide**

Perceived skills inequity was also raised as a strong inhibitor to sharing knowledge by many staff members. It was surprising that this perception is held by both police officers and public service employees. Public service employees believe that no matter what qualifications or skills they have they will not be acknowledged by police officers, especially if those skills and qualifications relate in any way to 'policing type activities'. It is said that they are deemed to be crossing the boundaries. Similarly, police officers feel disadvantaged by having qualifications and as such do not promote the knowledge gained from such qualifications. In addition, they tend to leave the police service in favour of other agencies. This is best described by the following comments by a public servant employee:

*I have been an intelligence analyst for the past ten years. During this time, I have graduated with an undergraduate degree in XX and masters in an intelligence related field. I also know of a number of other staff members who are completing their master's in Intelligence. However, whenever we develop any intelligence products they are given to our managers for comments before they are acted on. These managers are sworn police officers with no formal qualifications in the intelligence area. They may have some police operational experience but when it comes to writing strategic intelligence reports, they can be found wanting. They hold these positions because of their rank and not because of their skills. They also feel that they have to justify their existence, so when we give them the report they feel they have to make changes. In many case these changes are cosmetic and do not enhance the content. In one instance, I remember*

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*having my report changed so often that out of frustration I resubmitted the original report - which was accepted with very minor changes.*

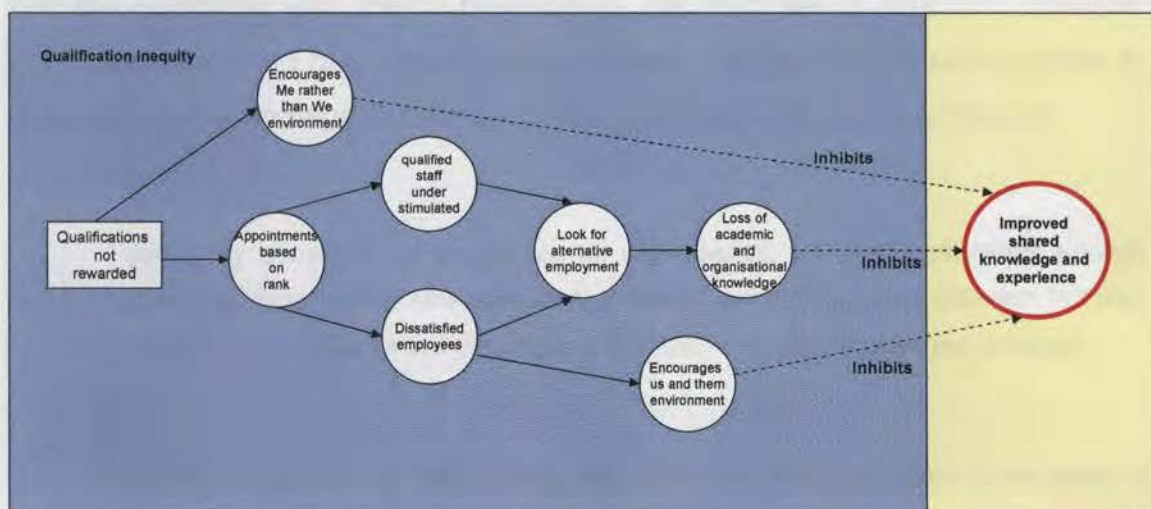
*I find it hard to take advice from someone who holds the position because of the number of stripes they have rather than the skills. There are many other agencies at the moment advertising for Intelligence analysts such as XX and XX who are offering better money and higher positions - I will be looking for a new job shortly and so will two of my colleagues and we will be bringing with us a combined total of about 30 years experience.*

Similar findings were evident among police officers especially those with educational qualifications. It was found that a number of police officers felt they were unjustly penalised because of their educational qualifications. Such officers are generally self starters and high achievers and as such tend to get involved early in applying for promotion or specialist positions. However, if they are not successful there is a tendency for them to move on to other employment fields. As one police officer said to me:

*I left university with a degree in XX and I could have become a XX, but I joined this job first off because I wanted to be a detective. I knew I would have to do all crap work at first but I thought that by coupling my qualification with hard work I would be appointed to a detective position. However, this has not happened as yet and I am now XX years [over 10 years] in the service. Since then I have also received a master's qualification. I have a number of good arrests and I have been involved in a number of complex cases and I have completed my detective training course. However, each time I apply for a detective position - I get the 'close but no cigar' response. I have on a number of occasions asked for feedback but this feedback is very inconsistent and is usually structured to be politically correct. I have made some discreet enquiries about it and I feel that the some of the interviewers think I am too academic and therefore not suitable for the position. If something does not happen soon I think I will have to reconsider my position in the police service.*

<p> <i>Self Reflection and insight</i> </p> <p>           Loss of corporate knowledge - Inequity relating to qualifications skills         </p>	<p>           Having been involved in policing for the past 25 years, I feel I can discuss this topic with some conviction and expertise. I say this because I have presented myself for promotion without and with a degree. I joined the police in Ireland without having a degree and I was promoted to the rank of sergeant. It was then I felt that having a degree would not only be good for my self development it would also enhance my promotion opportunities. I was correct on the self development point but completely off the mark when it came to promotion. I remember distinctly at my promotion interview, armed with my undergraduate degree, a comment being made concerning the time it must have taken me to do that degree. However, this comment was not made as a compliment or tribute to my time management abilities – it was made with some contempt. This contempt was obvious when one of the interview panel members inferred that I had obviously done most of my study during working hours.         </p> <p>           With the number of senior police officers in the Western Australia Police with degrees, you would think that the resentment expressed to me 15 years ago does not now exist. However, this outcome indicates that the educational resentment does in fact exist. A case in point relates to the Commissioner who has a PhD but has discontinued using the title Dr in his name. This has come about as a result of numerous comments made about him being 'too academic'. These comments are surprising in that he has been an operational police officer for most of his career including running a number of operational police districts. This resentment was not only obvious among the rank and file it was obvious from the continual references made in the media. As one Inspector said to me if being an effective police officer is a good thing, surely being an effective police officer and having a PhD is even better. One of the reasons for the resentment could be that there is a general attitude among police officers and members of the public that police work does not require much intellectual skill and whatever skills are required can be learned on the job. In addition, it is one of the few occupations remaining where a person can join as a recruit and become the CEO without any educational qualifications.         </p> <p>           However, the very people, who should realise the benefits of having qualifications, can by their own actions, negate the need for such credentials. For example, there is a saying in policing that once you are appointed to the rank of commissioned officer you are anointed with all knowledge. This saying has come about as a result of senior police officers being appointed to complex administration positions based on rank rather than skill or qualifications. It is this very practice that sends the message to rank and file members that you do not need educational qualifications to run specific complex sections of a police service, you just need to know how to police –thereby perpetuating the qualification and non qualification divide. This is illustrated in figure 22 below.         </p>
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**Figure 22 - Qualification and non qualification divide**

#### **4.2.2.5. Influence of command and control management style**

The management style in police agencies emphasises a bureaucratic command and control approach. Findings from this research indicate that an inhibiting knowledge sharing factor stems from officers' subservience to the rank structure. I found that since police officers are trained to be subservient to higher ranking officers, important knowledge sharing traits such as innovation and creativity can be stifled. This is even more apparent if senior officers are not open to feedback and input especially the sharing of knowledge in relation to new ideas. In addition, I found that disproportionate of oversighting by external bodies compared with other agencies also impacts the sharing of knowledge. This feedback came from three main sources. The first was from a group of police officers undergoing an Officer Development course which I used as part of my focus group sample. However, most of the data was elicited during an ad-hoc lunch time conversation. These particular officers said that while they were not afraid to respond to my questions in the class, there were a number of higher ranking officers present and they believed that the comments could be misconstrued as relating to those officers. One of the respondents maintained that in policing, one had to be careful concerning the questions asked and the responses given, especially if higher ranking officers were present. The second data set came from an email written



to me after a conversation I had with colleagues concerning knowledge sharing and the command and control philosophy. The third set of data was obtained from conversations I had with a number of senior public servant who I asked to comment on my findings. A number of the comments are provided below:

*I guess my general point is that, as an organisation, we don't ask nearly enough exploratory, 'surprise me' type questions, at least in our ordinary work situation. We wait to see what the higher rank thinks especially if that rank can influence our promotion*

*I think that is correct, we will not push our opinion if it does not adhere to the views of those in authority. Especially high ranking officers*

*I know of one instance where a high level administrative position, currently occupied by a police officer, was suggested to be filled by an unsworn. A particular senior officer said that he would not support the suggestion as unsworn have a tendency to answer back.*

<div>25</div> <div><b>Self Reflection and Insight</b></div> <div><b>Command &amp; control</b></div>	<p>This conversation went on for al least one half hour and the comments presented above are reflective of that conversation. It can be seen that subservience to rank is a problem within the policing environment. This problem becomes more concerning when you think that this data was provided outside the classroom setting where officers felt more comfortable talking about this issue without the presence of higher ranking officers. This would indicate as mentioned above, that police officers are not inclined to push an opinion with officers of a higher rank</p> <p>To confirm these assertions, I discussed this issue with two senior officers who said that on the one hand, subservience to rank is good for operational environments but the concept should not be transported to administrative settings. They maintained that the authoritarian style adopted and accepted by many senior officers will take a long time to change.</p>
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To develop the rank concept further, I had a conversation with two senior officers. This conversation provided another school of thought in that promotion to higher ranks influences operational policing commitment and the capacity to share knowledge. It was suggested that police officers tend to be less committed to policing the further they move up the promotion ladder. These officers maintain that the higher officers are promoted the less involved they are in operational policing. With every promotion, the gap between the work they initially joined to do and the job they are currently doing is widened. However, this was later put into perspective by one of my validation group who explained:

*I do not believe they are not committed to policing. I believe that they are as committed but now with a different focus. The further up the ladder they go the more knowledgeable they become. What I mean is after two or three years service they know a lot about operational policing and as such they have a lot of knowledge to share and therefore appear very committed to the job. But as they get promoted, they need to know a little bit of information about lots of things. Therefore, they have little knowledge to share when it comes to operational policing and intelligence. The focus of the knowledge is now different.*

A senior public servant whom I spoke with regarding this supported those of the senior police officers.

*Hi Vince – I agree with what you have found to date in that rank within this Police service can be an inhibitor to the sharing (or progress) of knowledge for the following reasons: There is a certain level of knowledge elitism at rank (especially once commissioned rank is achieved) where certain knowledge is seen as a privilege of rank. The level of rank determines the field of knowledge that one would be concerned with i.e. The higher ranks would have knowledge issues of planning, long term future events, public perceptions (and the press), strategic policy, the WAPS position as to Australasian Policing directions and organisational and community leadership. Whilst those at lower ranks would be more concerned with day to day operational issues and the nature their district and of policing styles within that sphere. Therefore, there would be no perceived need for the different levels to share these kinds of knowledge. Business knowledge would not necessarily overlap with operational needs so the knowledge would also tend not be shared in these circumstances.*

<p><i>Self Reflection and Insight</i></p>	<p>On reflection, it would seem that the above explanations have merit. From my experience I remember when I was a young police officer I loved the job as did all my colleagues. We socialised with each other, we helped each other and above all, we shared our knowledge with each other. It could be said that we knew 'lots about little'. However, as time went by, different officers got promoted – myself included. With each promotion, my quest for knowledge changed from operational knowledge to corporate knowledge. With the amount of knowledge I was required to have I began to know a 'little about lots'. Therefore, the knowledge I had to share was not appropriate to the operational and intelligence environment. As the public servant said above – I was knowledged-out. Nevertheless, the findings relating to the promotion system may also have an impact here.</p>
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Coupled with the internal rank influences, police services have also been faced with other issues of accountability in the form of integrity (Dupont, 2003). This has led to an increase in external police oversight bodies (Chan, 1999) where holding the police to account has become a growth industry (Goldsmith & Lewis, 2000, p. 1). Police officers refer cynically to such agencies as the external rank structures.

While police officers agreed that it is necessary that the police services be accountable to governments and the public, they were concerned that the increase in over sighting was stifling organisation innovation and creativity. In addition, overlooking was perpetuating the need for stronger command and control practices. The following comment, from an officer who contacted me by email after my talk to an Officer Development Course reflects those concerns:

*Vince I think your research into knowledge sharing in the police is exciting. It definitely generated some debate during the week. I was speaking to XXX and XXX and since our assignment is about XXX we were particularly interested in your comments on knowledge sharing and creativity. That got us thinking about how risk averse we are as an organisation and as a result, we are not good at being creative or innovative. How can we be? First, we operate within the command and control style which more or less emphasises that the boss is king and those under the boss have nothing to contribute – subordinates should be seen and not heard. This stifles our capacity to be innovative. Second, we have our own internal investigations unit, the public servants have the Public Sector Standards investigation unit, and then there is an Ombudsman a Corruption and Crime Commission and many numerous social and ethnic bodies where*

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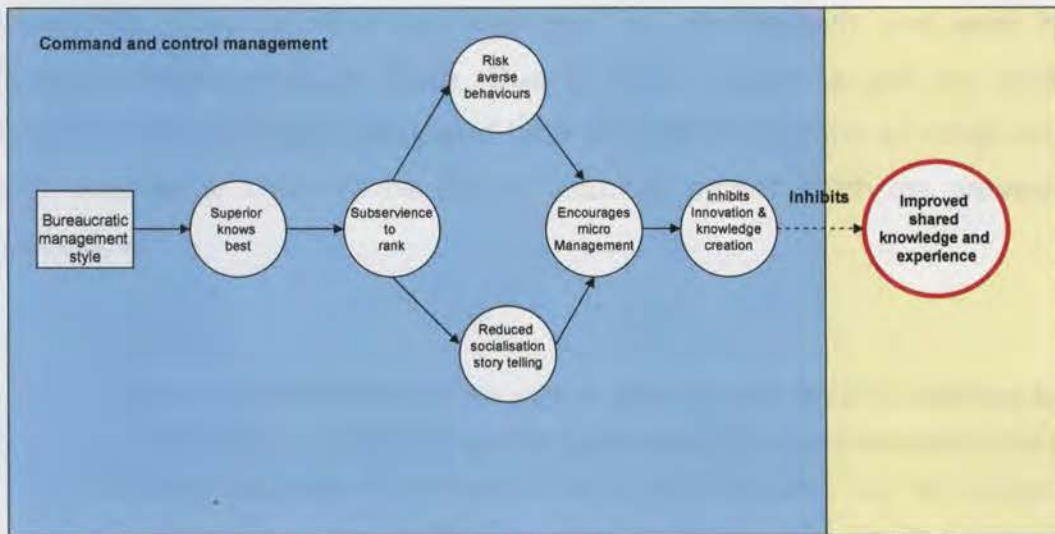
*people can make complaints about the police. I do not know of any other organisation that has such oversighting – do you? How can we be expected to be innovative? To be innovative and creative you must take some chances and that's ok until you fail. Then all your actions come the under scrutiny of those bodies. As XXX said it is like adding another couple of ranks on top of what we already have, thereby reducing any chance we have of flattening and loosening the command and control regime. Going back to your project on knowledge sharing – if we cannot innovate we cannot create and therefore we cannot procreate. (I was going to use the term share – but I thought procreate fitted better – you know what I mean)*

It has also been said that the command and control explicit and procedural philosophy leads to a micro explicit and procedural management approach where managers concentrate on ensuring bodies are on seats rather than concentrating on an outcome focus approach - managing the wrong things. The outcome of the micro management style is that staff do not work more than they are required. This in turn leads to loss of socialising and loss of story telling and accordingly the sharing of knowledge is inhibited as is highlighted below by the comments of a police officer from an intelligence business unit:

*A number of years ago we seemed to be trusted much more by our bosses. We had autonomy and we were allowed to manage our time – as long as the job was done. It is different today, now it is bums on seats no matter what the quality of the product is. I suppose that this stems back to a time when sworn officers spent most of their time working on front-line duties. We were allowed make decisions and managers trusted us. Now it seems that since most sergeants and commissioned officers do not spend any time on the street they have become removed from the lower ranks. They forget that we have intellects and do not give us credit for intelligence.*

*At my office I could arrange meetings and not have to justify my day as long my work was done. I enjoyed it and as a result, I gave more hours to the job than I should have. Within reason, I did not claim any allowances. Now as I said all this has changed. Managers do not trust us and they treat us like children. In my office I have to sign in and out, while that is not too bad but my details are recorded whenever I leave the office. The door used to be able to be opened manually but now there is an electronic device fitted, that means when I leave the office my length of absence is recorded. I know they say that this is not the purpose of the device but I know where the details of a part-time staff member were accessed to see if that officer was actually in the office during certain times. As a result any extra time that I used to give freely to the police service I now claim as time of in lieu or overtime. In other words its head down bum up*

*and I am gone when my eight hours are done. This also has led to less socialisation and tea room banter where much knowledge used to be shared.*



**Figure 23 - Command and Control Management Style**

#### **4.2.2.6. Managerialism (New Public Management)**

The need to ensure that government services are provided both efficiently and effectively has influenced and shaped the drive for public sector efficiency in service delivery, including the need for greater transparency and accountability. As such, New Public Management (NPM), offering a new model of public sector management is a public management trend that is gaining popularity throughout Australia. This model has led to a greater concern for increased efficiency through measurable performance outcomes and decentralisation (Funnell, 2001) Therefore, it was interesting that this research should find that a management model introduced by governments a decade or so ago to improve police effectiveness, is actually impeding knowledge sharing in this police organisation.

A number of supervisory officers in different police stations raised concerns about the ever increasing time demands placed on them to collect data in relation to organisational inputs, outputs and outcomes at the expense of creating intelligence. They maintain that the time spent filling in forms to meet the requirements of performance reporting is at the expense of time needed to create intelligence related documents. These concerns were raised while I was

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speaking to a group of six or seven officers, while having some refreshments after a meeting we had regarding a project unrelated to this research. I felt that what they were saying was important and I explained my interest in the comments. They became very interested in my research and each had a number of comments to make. Due to time constraints and my ability to recollect later what was being said I asked them to send me an email outlining their comments. Three of the officers returned emails which are presented in part below:

Email - # 1

*I have been a police officer for the past 20 years. A good part of my time was spent at xxx and therefore I realise the need for police officers to ensure information that comes into their possession to be sent to the bureau so that it can be analysed and subsequently shared with others who may need it. However, for the past number of years, I have noticed a decline in number of intelligence related documents passing through my office and an increase in output based management data. We are continually asked for data on how many breath tests we took last month, how many speed detections we made how many hours we spent on community service type work and every year the data required seems to increase. No one has ever asked me about intelligence generated at this district.*

Email - # 2

*Throughout the year, my officers are given activity surveys to complete, but they may as well be filled in at headquarters for all the worth they are. These surveys involve police officers accounting for every 30 minutes of their working day for a period of a week or more. How can you expect busy police officers to accurately fill in activity surveys when they are chasing their tails trying to finish many other important policing tasks?*

Email - # 3

*Providing output based management data eats into my time, especially those activity surveys. ...to ensure that the forms can be used with some confidence they have to be checked by supervisors. To do this properly we have to search a number of data bases to cross check what has been recorded. This consumes an enormous amount of my time and effort which could be directed to real policing activities. To make matters worse some of the data required is confusing, what one police officer may record as traffic patrolling, another may record as community work. Therefore, I have some doubts about the accuracy of data that is eventually collected.*



A number of comments were made regarding the concept of decentralisation. It was said that a number of mistakes were made when implementing the decentralisation model. As such, it resulted in the generation of a 'patch mentality' where data information and subsequent knowledge became district property rather an organisational asset and was not shared appropriately across the organisation.

*I remember when we worked as a police force, we all knew we were in it together and we helped each other as best we could. We had different specialist squads that were on top of the information and if we needed information, we would contact them and they would give us what they had. For example if a gang was committing robberies across the metro area, the robbery squad would collect all the information they could from all districts, turn that into intelligence and work with us to get a result. However, the central specialist squads were disbanded in favour of local squads but these local squads were not given the appropriate resources and they did not have the necessary skills. Now rather than having one effective squad we have nine or ten very poor squads. Well I think we have anyway – it all depends on what each superintendent decides to put in place. All I know is that if a robbery is committed in my district we may not know that similar robberies were conducted in other districts. In fact rather than share the information they will hold onto it to try to get some the catch so it looks good for their district – what is the sense in that? So much for improvements in intelligence.*

<b>Self Reflection and insight</b>  <b>NPM</b>	<p>The WA Police is not the only police organisation to feel the impact of NPM practices. What began as a sound theory has not materialised in practice. Many debates and reports have been initiated regarding the success or otherwise of the concept of NPM. It is my view that the NPM has a place in public sector management, but needs to be a balanced approach between economic efficiencies and social demands. The emphasis on NPM practices appears to have been at the expense of the important social aspects of policing- which in many cases cannot be quantified or costed. To date there has been an over reliance on economic rationalism as opposed to social rationalism. This reliance has increased in policing with governments becoming obsessed with police agencies meeting stated outcomes.</p> <p>This in turn has fuelled an obsession to collect data, produce annual reports strategic plans and sustainability plans to name a few. As one officer said to me 'If there were a direct link between writing plans and fighting crime, Australia would have a very low crime rate'. While my research has highlighted the impacts of NPM on sharing, it appears that NPM may impact many other</p>
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	<p>areas of policing – suggesting an area ripe for further research. It should be noted that only negatives were said to me however, there are many good aspects of NPM. One positive aspect specific to police is its influence towards making police organisations more accountable for their use of resources.</p>
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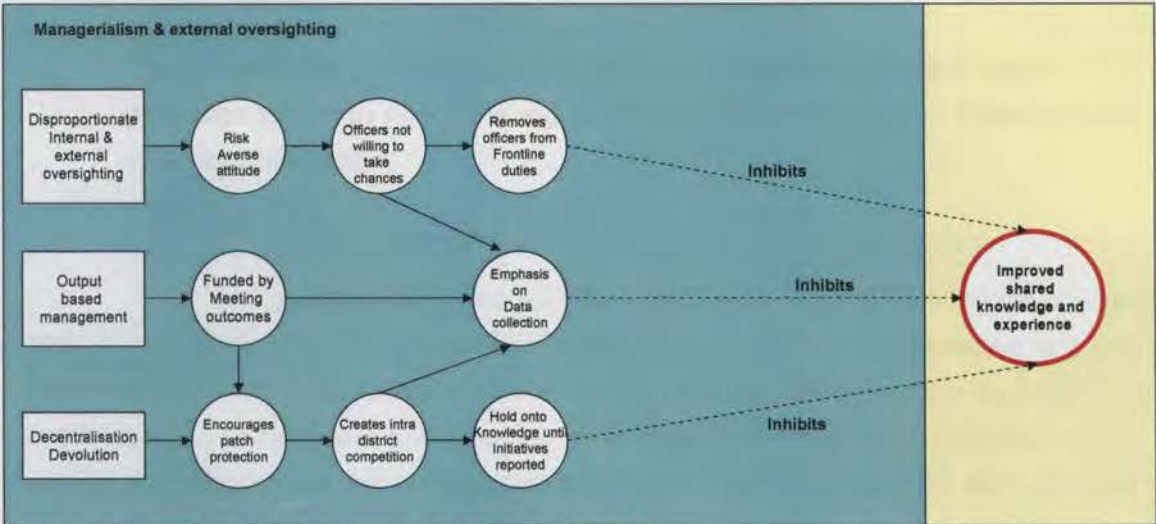


Figure 24 - Managerialism (New Public Management).

4.2.2.7. IT driving business rather than business driving the IT

Some staff members raised the issue of the information and communications technology as a hidden inhibitor of knowledge sharing. They described the IT systems as being aesthetically pleasing but functionally restrictive. However, when they were questioned further about this matter, most officers acknowledged the need for IT to assist in police organisations’ increasing accountability and compliance loading.

They say that IT was embraced by all staff members who believed that the systems would actually free up additional hours for front line police functions and assist with generating intelligence products. However this has not been the case, in fact it is believed that the IT and information systems in the current format are actually impeding sharing of knowledge.

We talk about it all the time, well every time we have to enter the same data in different systems. The failure to link systems such as xx, and xx has resulted in data having to be inputted more than once. What good is an investment in IT we keep feeding it but it does nothing for us? What is the point in having a dog and barking yourself? This

causes me and my staff no amount of frustration, it is time consuming and is a major constraint to creating intelligence.

Officers attending an Officer Development Course reinforced those comments with one making the comment that

The IT systems are aesthetically pleasing but functionally restrictive and inhibit knowledge sharing by driving the way we input the data rather than us driving the way we access information.

<div>26</div> <div>Self Reflection and insight</div> <div>IT</div>	<p>While information technology has come in for quite a bashing, the advances made in information technology should be looked at in perspective to where it was 15 years ago to where it is now. I recently presented this feedback to the Director of IT and a number of his senior police staff which generated a a very good discussion. We spoke about where IT was 15 years ago and compared it to where it was now. We laughed when we recalled the imperial typewriter which sat in every sergeant's office and our amazement when these were replaced with typewriters that had a 'golf ball' shaped correction facility. This laughter became stronger when one mentioned that his office had received one of the first typewriters that could store 50 characters in its memory. This storage facility enabled staff to press one button and the title of the Police Division and District would rattle across the page. He told us that because of this perceived time saving, police officers would travel from every police station in the district to type statements and other correspondence. However, the time wasted travelling to and from was never considered to be a problem.</p> <p>We spoke about the telex machines that took up half an office and the amount of time running to and from to tear off messages and distribute to officers. Others mentioned the first computers at the stations and the courses they had to do to master the word processing commands. During humorous banter one of the group said he would hate to go back to those systems. It was then we realised that IT within policing had progressed at such a pace that we had forgotten how advanced we had become in 15 years. I have observed that in some aspects, IT is driving the business of policing especially in relation to data inputting, but I have no doubts that very few police officers would like a return to the older systems. As one officer said to me – it is difficult to combine 21<sup>st</sup> century IT systems with 19<sup>th</sup> Century policing methods. While I cannot fully endorse this comment, I am convinced that there is a need for a thorough examination of changes in policing and the corresponding developments in IT.</p>
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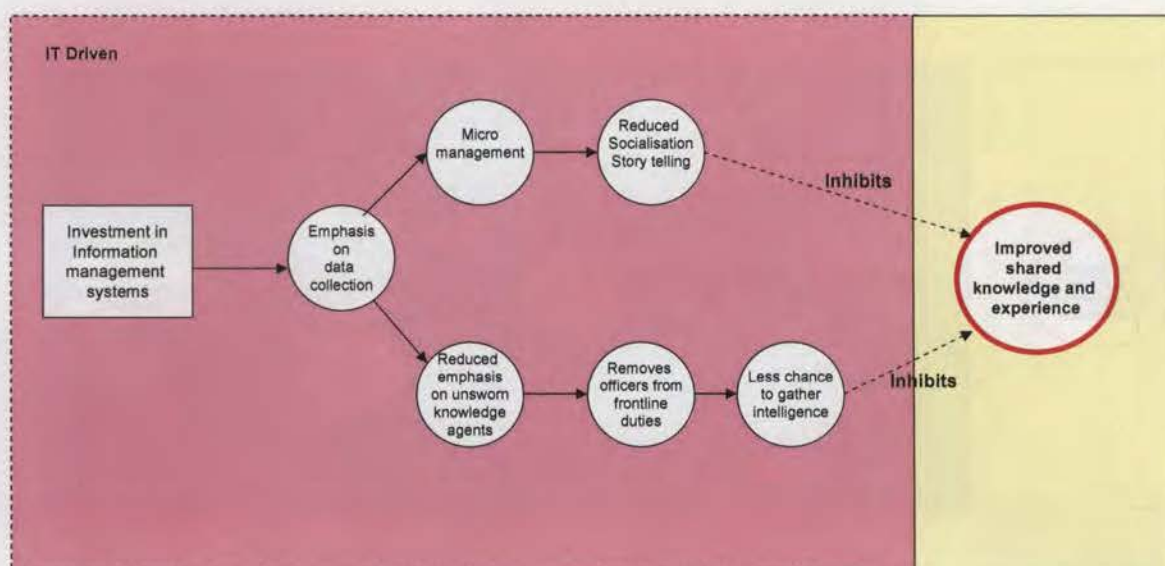


Figure 4 – IT driven

#### 4.2.2.8. Training courses

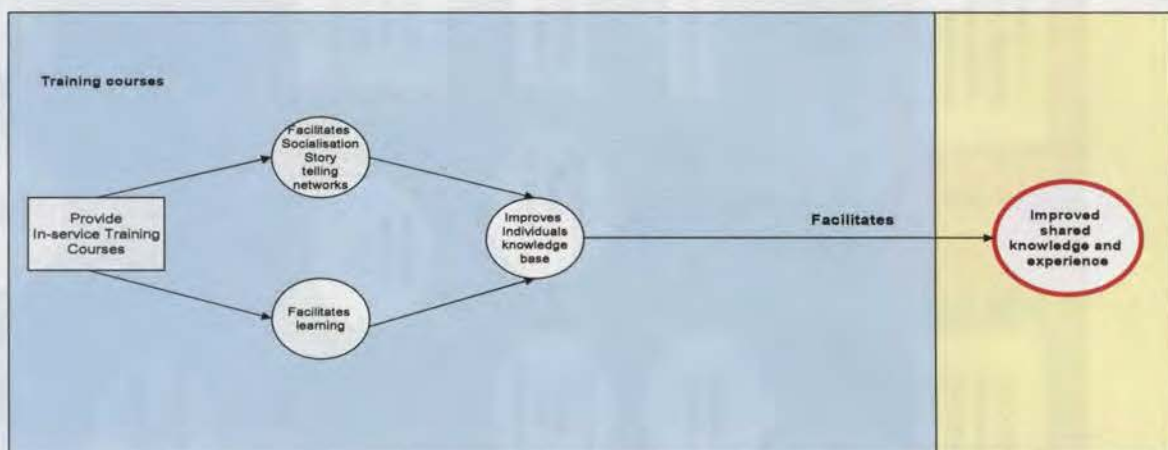
The only universally agreed facilitator of knowledge sharing related to in service training courses. It was interesting to note that the knowledge gained by attending the course was not deemed as important as the knowledge that was shared during breakout sessions and lunch breaks. The following comments reflect the knowledge sharing benefits associated with attending training and development courses.

*It is great when we go on courses, not only do we get to learn from the course content, we also get to know what is happening in the job itself.*

*It seems that I make good contacts each time I attend a training course ...each contact helps me cut through the endless bureaucracy that exists in my unit.*

*Development courses are a great way to share information and knowledge; sometimes I get more from interacting with the class participants than I do from the modules.*

<p><i>Self Reflection and insight Courses</i></p>	<p>I have been involved in a number of in-service training courses and I do agree that much information is shared during these sessions. However as I discuss in the next chapter this may have more to do with the provision of a medium to socialise rather than the course itself.</p>
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**Figure 25 - Training courses**

### 4.2.3. Conclusion

This section presented the views of individual staff members regarding their perceptions of the inhibitors and facilitators of knowledge sharing within this policing environment. The outcomes further advance our understanding of knowledge sharing inhibitors and facilitators within a policing environment and provide a foundation for understanding the phenomenon from individuals' perspective. The research has established that knowledge sharing operates in a highly complex system of ecological entities with interrelationships that are unique and difficult to capture. This research found eight individual factors that have a facilitating or inhibiting influence on individuals sharing knowledge. However, within each of these factors, other influencing relationships are evident.

The following figure shows the interrelatedness of each of the factors. While the diagram appears busy or as some have suggested – confused, I felt it was necessary to show the complexities of the challenges facing the Western Australia Police. It is clear from the diagram that for knowledge sharing to be successful there is a need for an organisational approach. Tackling one factor in isolation will not suffice as the other factors will still continue to operate in the background.



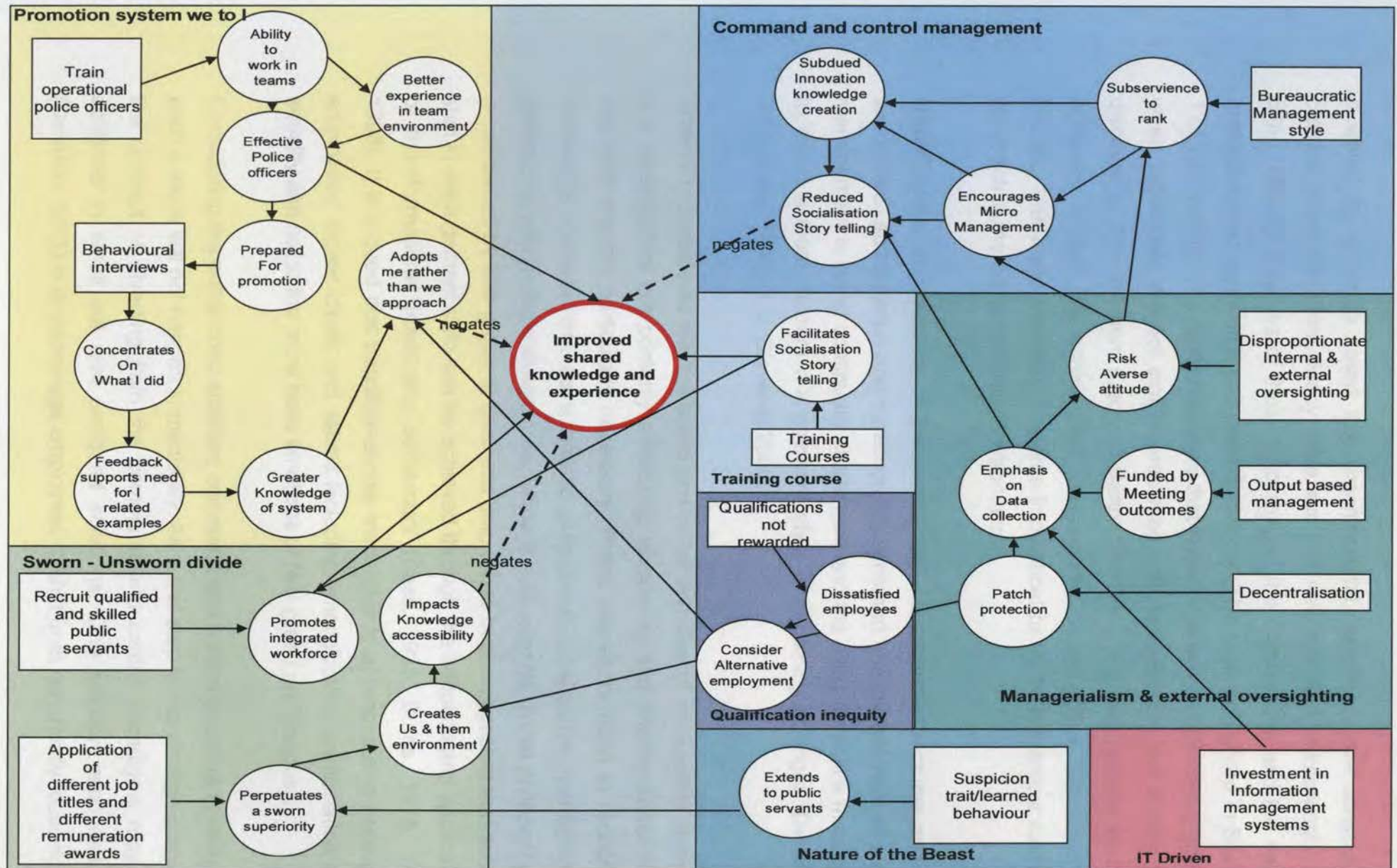


Figure 26 - Interrelationships of knowledge sharing factors



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It would be unfair to assert that organisational members have consciously created these inhibitors. Many have evolved naturally and unknowingly and often reflect the values of those who shaped the organisation and the senior managers who maintain it and enact initiatives. This was highlighted in Section 1 of this chapter. The literature shows that knowledge is more effectively shared when individuals are not simply presented with answers but are involved in discovering the solution (Leonard-Barton, 1998). This involvement is best achieved in less hierarchical and bureaucratic organisations (Davenport & Prusak, 1998) and therefore it seems impractical to try to implement such an approach in the current policing environment.

Nevertheless, the suitability of the paramilitary, hierarchical structures and the associated authoritarian and bureaucratic command and control style of police management is being continually challenged and the need for police managers to adopt a more modern management style is becoming stronger (Densten, 2003; Etter, 1996; D. J. Stevens, 2000).

When it is considered that the bread and butter activities of intelligence analysts and investigators are primarily accessing, leveraging and sharing knowledge, this shift appears particularly necessary. Police managers need to recognise knowledge management as a holistic purposeful constructive management philosophy with multiple dimensions. Since it is an organisational philosophy- it is not owned by one group or business unit. It has been suggested that such a shift in management style can be achieved through the adoption and application of transformational leadership behaviours (Bass, 1998; Burns, 1978; Yukl, 1998). It is argued that transformational leadership is appropriate to appeal to employees' higher ideals and values including emancipation, participation and equality and not to the more base emotions of fear greed and jealousy.

Considering the entrenched stratified command and control structure in policing, such a move will not happen immediately. As a first step in this change process, the concept of diverting from the command and control paradigms may be achieved in small but well designed solutions. One solution espoused by (Densten, 2003) is to encourage employees to shift from continually focusing on

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their immediate operational environment to one that embraces and integrates the external environment. Employees are encouraged to develop conceptual maps of their external environment to establish where their organisation links with that environment. This shift in focus can be achieved if employees are sufficiently intellectually stimulated. With that in mind, the next section looks at a way to move from the concentration on local investigative practices model to a distributed networked environment where the command and control philosophy is reduced, intellectual stimulation increased and knowledge sharing enhanced.

4.3. Future direction: – CoPs for COPS

The previous two sections in this chapter explored the facilitators and inhibitors to knowledge sharing from both a police organisational and individual level. It was found that many internal and external factors influence the creation and sharing of knowledge in some way. A common theme arising in both sections is the command and control management style which does little to foster openness and knowledge sharing. Since the hierarchical and command and control philosophy of management is pervasive in policing environments it is fair to assume that any flattening or mellowing of the style will not happen in the foreseeable future, as such the introduction of innovative strategies or tools to share knowledge is required

4.3.1. Introduction

As mentioned at the beginning of this chapter, this section was not initially contemplated in my early research proposal. The need emerged later in my research when I discovered police officers required an opportunity to discuss and share knowledge without the constraints of the current command and control management style, especially in a distributed environment. In addition this concept was also used address the constraints of sharing knowledge across national and international jurisdiction especially in the investigation of globalised crime. The following narrative provides an explanation:

<div><div></div><div><div>Self Reflection and insight</div></div></div>	<div>A strong theme emanating from the research is that the command and control management style, adopted in policing, does little to foster openness and knowledge sharing. I discussed this problem at length with many police officers from the Western Australia Police and most agreed that the emphasis on command and control, while necessary in certain circumstances, is a cause for concern. Some officers referred to this as the 'rank mentality' and maintained there was a time and place for its use. They argued that the problem may be reduced if it was possible to devise an informal method or system of operating that does not involve the elements of the command and control philosophy where police officers had sufficient freedom to share their</div>
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knowledge and float their ideas. I began to think about this comment and toyed with the idea of exploring the concept of communities of practice (CoPs). I discussed this with my thesis supervisor and we agreed partly tongue-in-cheek that the concept CoPs for COPS had merit and deserved exploration.

Shortly after that conversation, I attended a meeting in Canberra with Australian Police Federal Agents. I got around to discussing my research with a number of those officers and soon realised that they were also having problems in relation to knowledge sharing. These officers were involved in running the Management of Serious Crime (MOSC) program at the Barton College in Canberra. This program is open by invitation to detectives and investigators from Australasia and targeted regions from around the world. The program operates similar to an academic conference, in that a topical theme is selected and participants deemed to be proficient in that area are invited to attend. The overarching design of the program is to encourage knowledge sharing among participants in order to facilitate the creation of new knowledge in that field for the benefit of all police and law enforcement practitioners. However, it was said that once the program comes to an end and officers return to their respective police services and officers get involved in the usual organisational politics - the sharing of knowledge also comes to an end.

I mentioned that members of the Western Australia Police had suggested the need for a 'space' that would allow officers to meet in an efficient and effective way to share knowledge on matters of concern without the influence of organisational politics. This conversation touched on the concept of 'sharing communities' within policing. I briefly explained my musings relating to CoPs for COPS describing it as a sharing forum for local or geographically distributed investigators or intelligence analysts within a similar domain focus to meet on a regular or as needs basis to share knowledge pertaining to matters of concern.

This concept was deemed to have merit and in fact, the manager of the MOSC informed me that the previous week he had read a paper relating to communities of practice and he was impressed with the concept. But was concerned by one of the comments that communities of practice have rebel properties, undermining the formal structures of the organisation. This comment was referring to a paper by Stewart (T. A. Stewart, 1996). I explained that that was not necessarily the case and with correct management, CoPs for COPS may be a very successful tool. This input by

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	<p>the manger added to the conversation and many scenarios and potential dilemmas were discussed. The main cause of concern related to the logistics and costs involved of police officers meeting physically on a regular basis.</p> <p>It was agreed that an on-line community of practice may be the solution, but a number of concerns were raised in relation to the readiness of police agencies and individual officers to adopt such an approach as were the elements involved in managing and sustaining the concept. As one officer said to me – ‘the concept is great, but how do we explain this to our IT technicians what we want?’ The final outcome of the conversation was that there was a need to develop a model that would give them an understanding of the concept of CoPs and how it could be developed.</p>
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Based on the above narrative I explored a conceptual framework for developing an online community of practice within a policing environment. My specific focus was on developing distributed communities of practice to enhance the sharing of knowledge in the investigation of globalised crime. The end result is an initial framework that police agencies can use on which to reflect when first considering the implementation of a community of practice.

**4.3.2. What are Communities of practice?**

Communities of practice have been described as ‘groups of people informally bound together by shared expertise and passion for a joint enterprise (Wenger & Snyder, 2000). Others have explained them as a volunteer group that emerges through work related interests (J. S. Brown & Duguid, 1991). Many examples of communities of practice have been found in a number of organisations but have been known by different titles. For example, they have been referred to as ‘learning communities’ at Hewlett Packard Company, ‘family groups’ at Xerox Corporation, ‘thematic groups’ at British Petroleum and ‘knowledge networks at IBM Global Services (Gongla & Rizzuto, 2001) . Whatever definition or name is adopted, it can be seen that the common thread is that ‘people need to affiliate with others in their profession, for purposes of both personal development and practice sharing’ (Hammer, 2000).



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#### **4.3.3. Rationale for Communities of practice**

Information technologies are now used worldwide to allow people from different countries at different times to communicate with each other. To that end, more and more organisations are using the Internet platform to connect and provide a virtual work space for teams, made up of people in different places, working on the same or similar projects. These spaces are commonly referred to as on-line Communities of Practice (CoPs). They have been described as a way of giving people the electronic equivalent of gathering around the coffee pot in the office. In short, it is using IT to connect socially and is a critical method of leveraging knowledge sharing within many contemporary businesses (Rumizen, 1998).

Accordingly, many businesses are focusing on the use of communities of practices to foster sharing of knowledge and best practices and include such companies as Johnson and Johnson, Xerox, Chrysler, and the World Bank (Rumizen, 1998). For these extended work practices to operate effectively, it is necessary to develop ways in which knowledge can be created and shared among employees (Barson et al., 2000). An effective way to overcome these various challenges and to accelerate innovation and disseminate learning and knowledge sharing is through the development of communities of practice (Lesser & Everest, 2001; McDermott, 1999b; Wenger, McDermott, & Snyder, 2002; Wenger & Snyder, 2000).

#### **4.3.4. Global problem of crime**

As with the numerous pressures now facing commercial organisations (Hildreth, Kimble, & Wright, 2000), policing in contemporary society is becoming an increasingly complex function (Davis, 2000; Jinks, 1990). Crime is both a global and local problem with many local crimes having international dimensions. Historically, laws were made by and for sovereign states with the geographic concept of borders and jurisdictional limitations. However, in today's criminal environment, geographic borders are increasingly meaningless (Davis, 2000). This has led to a situation where police agencies need to be able to operate and share knowledge across extended or distributed environments. The fact that the

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responsibility for crime and justice in Australia is spread across numerous and diverse public agencies implies that there are potential difficulties in creation and sharing of knowledge in the pursuit of crime resolution.

For example, the responsibility for crime and justice in Australia is divided between nine separate jurisdictions over which seven police agencies exercise responsibility. In addition, there are three statutory commissions operating in two states with responsibilities in criminal justice areas. Another body, the Australian Crime Commission (previously the National Crime Authority until 2003), has responsibility in relation to what is usually referred to as organised crime. The situation is complicated further by the involvement of a large number of state and federal agencies with various levels of interest in criminal matters. These range from the Australian Taxation Office, the Australian Customs Service and the Australian Securities and Investments Commission at the federal level, to a variety of bodies such as the Independent Commission against Corruption and the Police Integrity Commission in NSW, the Crime and Corruption Commission in Western Australia and environmental agencies in each state.

Not only is there a need to encourage a networked environment among Australian States and Territories, there is also a need to develop on-line networks within each of the States. For example, in Western Australia alone, data obtained for the period January to June 2000 from the Ministry of Justice revealed 129 agencies were engaged in enforcing criminal and civil law prosecutions (Western Australia Police, 2000).

Simply increasing police and organisational resources without the appropriate knowledge creation and sharing strategies is no longer viable. One way to improve police outcomes is through enhancing the utilisation, efficiency and flexibility of physical assets and human resources. A notion gaining increasing interest to achieve cross organisational and jurisdictional success and global reach is the development of on-line teams (Burn, Marshall, & Wild, 1999). This notion is even more achievable by availing of the improved collaborative and

communications technologies now possible through the internet (Newell, Pan, Galliers, & Huang, 2001).

4.3.5. Benefits of Communities of Practice

Using a wide range of IT and social abilities, community of practice sites provide a space where practitioners can share ideas, information and knowledge. They build upon the knowledge-sharing that occurs in the online discussions by capturing the wealth of the information exchange, and serve as a resource for future discussions (World Bank Group, 2003). The following table is a review of the benefits of communities of practice.

Table 14 - Contributions of Communities of Practice - Developed for this research

Researchers	Contributions of Communities of Practice
(Wenger et al., 2002, p.14)	<div>They can:</div> <ul style="list-style-type: none"><li>• Connect local pockets of expertise and isolated professionals</li><li>• Diagnose and address recurring business problems whose causes cross team boundaries</li><li>• Analyse the knowledge-related sources of uneven performance across units performing similar tasks and work to bring everyone up to the highest standard</li><li>• Link and coordinate unconnected activities and initiatives addressing a similar knowledge domain</li></ul>
(Lesser & Storck, 2001, p.836)	<ul style="list-style-type: none"><li>• Decrease learning curve of new employees</li><li>• Help employees respond more rapidly to customer needs and inquiries</li><li>• Reduce rework and prevent reinvention of the wheel</li><li>• Facilitate the spawning of new ideas for products and services</li></ul>
(Wenger & Snyder, 2000, p. 140-41)	<ul style="list-style-type: none"><li>• Foster new approaches to problems</li><li>• Help drive strategy</li><li>• Start new lines of business</li><li>• Solve problems quickly</li><li>• Transfer best practice</li><li>• Assist in developing professional skills</li><li>• Help companies recruit and retain talent</li></ul>
(J. S. Brown & Duguid, 2000)	<ul style="list-style-type: none"><li>• Develop very rich industry specific knowledge</li></ul>

4.3.6. Framework Development Methodology

The notion of communities of practice to enhance knowledge sharing within a policing environment was explored as follows:

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- Firstly, I examined the three basic elements of a community of practice (domain, community and practice), as proposed by Wenger, McDermott and Snyder (2002, pp 45-46), to confirm if they actually do or could potentially exist within a policing environment.
  - I then analysed the seven principles for cultivating a community of practice were then analysed to determine if they were relevant to a distributed investigative environment.
  - The candidate community for this research consisted of the participants in a program run by the Australian Federal Police at the Barton College in Canberra. The 'Management of Serious Crime' (MOSC) program which is open by invitation to detectives and investigators from Australasia and targeted regions from around the world.

#### **4.3.6.1. The essential elements for a successful community of practice**

Knowledge generating communities and the business processes where knowledge is applied must be integrated or 'tightly woven' In other words the two must create a 'double knit' organisation where operational workers bring not only their expertise and tacit knowledge to the community they also receive help with their own problems. This 'multimembership' concept allows the learning cycle to continue indefinitely (Wenger et al., 2002, pp. 20-21).

Despite the numerous forms that communities of practice take, it is suggested that three fundamental elements are common to all, these are:

1. A domain of knowledge that defines a set of issues and creates common ground and a sense of identity;
2. A community of people who care about this domain thus creating the social fabric of learning; and
3. The shared practice that they are developing to be effective in their domain which develops a set of common ideas tools styles and language that the community share

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Based on my experience and the feedback from others, I found that these elements are already present within policing environments. For example:

**The Domain of knowledge** at the macro level of policing creates a well defined common ground and sense of common identity or as Wenger et al call it; a *raison d'être*. At the micro level, the specialisations within policing (drugs, forensic, traffic) constitute knowledge domains within individual units, each with its own set of issues commonly experienced by members that can only be resolved by sustained application of knowledge and learning.

**A community of people** is also strong within the policing culture, and while it may appear similar to the domain element (see 1 above) in that its strength is at the macro level, it is my experience that the sense of community is strongest at the micro specialist level. This does not constrain the development of communities of practice; in fact, it enhances interaction and facilitates relationship building which is critical to the community element. In fact people working in small groups develop very rich knowledge (J. S. Brown & Duguid, 2000).

**Shared practice** is also strong in the policing environment where value is delivered through crime prevention and resolution. Where the domain element denotes the issues on which the community concentrates, the practice element denotes a set of frameworks, ideas, tools, information styles, language, stories and documents that the community share (Wenger et al., 2002). Through these mediums, the practice explores existing and advancing solutions to issues. The term practice denotes a set of defined ways of doing things in a specific domain, as such, practice can be described as the glue that connects the community (Wenger et al., 2002).

Having regard to the aforementioned discussion, it appears that the three elements required to cultivate successfully a community of practice are already present within the policing environment. This finding opened the way to examine the seven principles for developing a successful Community of Practice.

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#### **4.3.6.2. Seven principles for developing Community of practice**

Having established presence of the three domains the next step was to explore the seven principles proposed by Wenger et al (2002) for the successful formation and performance of specific communities of practice. I used the principles to evaluate the potential of the MOSC program to function as a high-performance community. The seven principles are:

1. Design for evolution
2. Open dialogue between inside and outside perspectives
3. Invite different levels of participation
4. Develop both public and private community spaces
5. Focus on value
6. Combine familiarity and excitement
7. Create a rhythm for the community

##### *1. Design for evolution*

Communities of practice differ from teams in that they have no formal hierarchy (Hildreth et al., 2000). Instead in communities of practice members earn their status through participation which in turn leads to legitimisation (Lave & Wenger, 1997). In addition, a team is established when an organisation assigns people to a project which usually has a defined timeline and outcome (Lesser & Storck, 2001; Wenger & Snyder, 2000). Teams are tightly integrated and driven by deliverables and outputs whereas communities of practice are 'loose-knit' and are driven by value and learning (McDermott, 1999a). Therefore to design a community that will evolve and develop over time it is necessary to invite community membership from those who will add to the development of the group and acceptance to participate must be voluntary (Wenger & Snyder, 2000).

These factors describe the MOSC group. This group has been in existence for a number of years and a large number of detectives and other investigators have graduated from the course. During this time, the course content has evolved to



address changes in criminal methodologies and new members are continually introduced with different interests, abilities and personalities.

<div>□</div> <div><b>Self Reflection and insight</b></div>	<p><i>This evolution however poses a number of issues. One relates to the fact that no matter how much effort is put into maintaining a contemporary course content, course coordinators cannot be expected to keep pace with the ever-changing criminal behaviours and methodologies. Another issue is that those who graduated from earlier courses may not be exposed to developing their knowledge in relation to new criminal behaviours, methodologies, and techniques. Such issues relating to course graduates' recency of knowledge could be ameliorated through the development of a community of practice. The very nature of the course and the graduates themselves indicates that the design for evolution is possible. In order to facilitate this evolution It is important that the community is not restrictive or over prescriptive so that it becomes a self consuming and self organising group.</i></p>
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Figure 27, below illustrates how the value of the community comes from the dialogue. This dialogue is the basis of community evolution, which in turn encourages expert input and cultivates trust and renewed vigour.

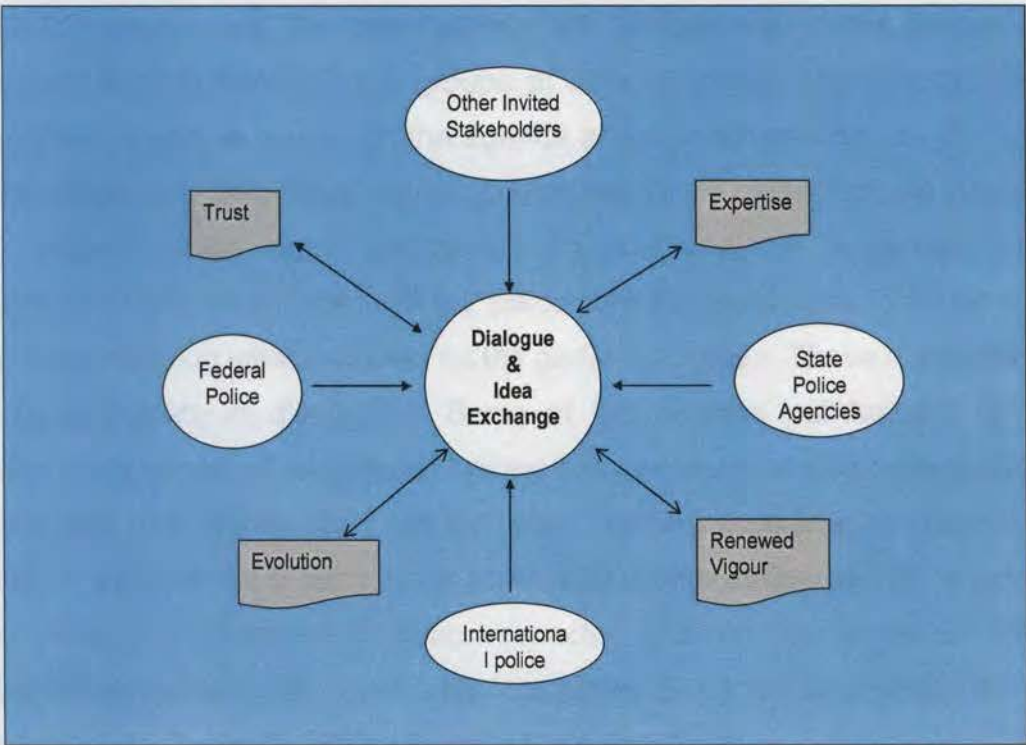


Figure 27 - CoPs - Designing for evolution - Developed for this research

II. Open dialogue between inside and outside perspectives

While good community design requires an insiders perspective, an excellent community design caters for outside input (Wenger et al., 2002). This principle is also supported by Storck and Hill (2000) who further suggest a need to encourage interaction to promote openness and allow for serendipity. This can be done by brining together people from within and outside the organisation who share a common interest, exchange ideas and endeavour to assist each other (McDermott, 1999b).

<div>□</div> <div><b>Self Reflection and insight</b></div>	<i>The MOSC community is highly receptive to such input. While a number of the program participants are from the AFP a large number are from other parts of the world and from non-policing organisations. Accordingly, this creates diverse networks and suggests that that core elements of the second principle required to develop open dialogue between inside and outside perspectives already exists where MOSC graduates bring ideas to the community and through the community, the ideas are distributed.</i>
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III. Invite different levels of participation

The need to ensure different levels of participation and interaction is important. However, this is a more difficult task than it appears on the surface. Wenger et al (2002) assert that the communities are divided into three groups, with members moving between the groups at different times. The first group is a small core of people who push the agenda and sometimes become the drivers of the community this group usually comprises 10-15 percent of the members. The second group, again comprising an additional 10-15 percent of the membership are those who actively participate in discussions. The remaining members make up what is known as the peripheral group. These members tend not to participate in discussion. Some of the reasons put forward for their position is a sense of wanting to belong but feel that their comments are not appropriate or that they carry not authority. The key according to Wenger et al (2002) is to design the community so that all members feel like full members. One strategy is to appoint a strong, respected and well connected coordinator to organise and facilitate community interaction and keep peripheral members connected (McDermott, 1999a; Milstein & Coutts, 2003).

<input type="checkbox"/>  <b>Self Reflection and insight</b>	<p><i>I believe MOSC augurs well in this regard in that any of the course lecturers would be seen as credible community coordinators. In fact, it could be that whenever a matter needs discussion relating to a particular specialism, the lecturer most qualified in the field would be well suited to facilitate the community. Another strategy is to ensure that community members move between the different levels at various times, otherwise it may be seen that some members are purely takers and not givers. In relation to MOSC community members, the issue relating to givers and receivers would rectify itself depending on the issue under discussion. Each member from the MOSC was selected because of a particular investigative skill or potential. The program not only enhances that members' knowledge, but also integrates a large number of experts' knowledge and experience. This in itself is an excellent face-to-face networking opportunity for investigators. Therefore, when a particular topic is being discussed in the community, the tendency will be for those with that know-how to become actively involved. In fact, it will be known who the experts in that field are, and not only will they be encouraged by the coordinator to participate it would be expected by the other community members that they lead the discussion. While this principle needs to be tested, it appears on the face of it that the ability to invite participation on different levels is feasible.</i></p>
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#### IV. Develop both public and private community spaces

The importance of developing private as well as the usual public spaces is seen as being a very important aspect in nurturing communities of practice. One reason for this is that the personal relationships developed through the private spaces build social capital and sustain the community through the periods of reduced communication (Hildreth et al., 2000). In fact, Hildreth et al suggest that it is only through personal contact and relationships that people will go that extra mile for someone. It was also felt that strong personal relationships overcame issues of identity – in other words, to whom am I talking and why should I share this information?

<input type="checkbox"/>  <b>Self Reflection and insight</b>	<p><i>Having regard to the culture of policing, the issue of identity, especially when operation in an online environment, will need to be addressed. It is my experience that police officers will only release a limited amount of knowledge to other police officers especially if they are not personally known. However, a situation does arise whereby someone seeking information from another who is introduced by a mutual significant other - information or knowledge will be exchanged. This is colloquially referred to as getting the 'nod' of approval.</i></p>
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	<i>Getting the nod operates when one police officer introduces another to an unknown third party, usually by saying something encapsulating the following "hello xxx this is yyy he/she is alright and needs your help". This type of introduction eliminates the need to have developed a previous relationship. While this may seem to be an unusual practice, it developed due to the distributed nature of policing and the need to gather information quickly. It can be seen that developing relationships and trust within an online policing community of practice is paramount. MOSC graduates from individual courses will have already developed these relationships. Those who do not know a participant during an on line discussion will soon know if that person has been given the 'nod' by the way other members respond. The coordinator can also play a major role in developing trust among unknown online participants.</i>
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Another way to develop private spaces is to hold conferences. Conferences could be held on an annual basis where all MOSC graduates are invited, with some being asked to present papers on contemporary issues and methodologies. This practice would allow members to network informally which in turn would strengthen relationships.

*V. Focus on value*

Focusing on value is the lifeblood of a community (Wenger et al., 2002). This is supported by Alavi & Haley (1999) who found that knowledge management systems need to be explicitly linked to high value. They also maintain that the quality and quantity of knowledge created is the key to long-term success. It is also agreed that value adding of information in terms of knowledge creation will not result from investment in technology itself, but from additional investment in specific people skills that can make best use of the information assisted by the technology (Harvey, 2003; Pan & Scarbrough, 1999)

A good way to assess value is for managers to listen to members' stories. These stories are known in many circles as war stories which give members a shared framework for interpretation (J. S. Brown & Duguid, 2000) and when considered in the context of the situation they can help clarify the sometimes complex relationship between knowledge creation and subsequent outcomes (Wenger & Snyder, 2000).

<div> <input type="checkbox"/> </div> <div> <b>Self Reflection and insight</b> </div>	<p>There are a number of ways to determine if the community is offering value. For example, the number of members continually engaging in discussions will be one measure of value. Police officers generally will not align themselves for too long to a time consuming practice, unless they see some benefits being realised. I believe that online community such as MOSC should only be brought together whenever a problem cannot be solved via face-to-face discussion or other means of communication such as email or telephone. The main reason for activating the online community would be when a major situation has arisen that needs the input of a number of experts. This type of approach will not only allow the community to focus on a particular issue, it will also enable easy measurement of the value outcome pertaining to the issue on hand.</p> <p>War stories are part and parcel of the police culture. While they are not a tabled item at any meeting they are an expected unofficial item usually raised to put matters under discussion into context. Up until now the value of such stories have not been officially recognised, and at various times some managers have tried to discourage this unofficial practice, however with the development of communities of practice the value adding potential of war stories may become obvious.</p>
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## VI. Combine familiarity and excitement

Wenger et al describe this as a means of providing a neutral place separate from the every day work pressures of people’s jobs. This is a medium where community members can offer *ad hoc* advice or ‘half baked ideas’ on a project without getting entangled in it (2002, p 61).

<div> <input type="checkbox"/> </div> <div> <b>Self Reflection and insight</b> </div>	<p>While this principle seems simple in its approach, it may be one that would be difficult to sustain within a policing environment. As mentioned previously, but not yet tested, it is suggested that the best way to sustain a community of practice within the distributed investigative environment is to call the community together only when a matter of importance needs to be discussed. The offering of <i>ad hoc</i> advice on ‘half baked ideas’ is not one that holds well within the policing community and would probably not get the necessary support from senior managers in relation to time involved and facilitation required</p>
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Nevertheless, it has been found that individuals who were operating from a distant location felt they were on a physical periphery and therefore did not have access to *ad hoc* encounters which those members who worked together were

able to benefit (Hildreth et al., 2000). Accordingly, this principle may be one that needs further investigation.

VII. *Create a rhythm for the community*

The rhythm of the community is the strongest indicator of its aliveness (Wenger et al., 2002,p 63). The value can best be assessed by the vital signs of the community which in essence are the number of stories and real outcomes that reflect the value gained by being part of the community.

<div><input type="checkbox"/></div> <div><b>Self Reflection and insight</b></div>	<i>From my discussion with others on this principle, there is a consensus that this rhythm will be automatic especially if most of the previous principles are in place. With regular meetings (private and public), the celebration of success and recognition of the community by senior managers across agencies; the rhythm will develop. However, this rhythm needs to be supported by a competent facilitator or coordinator to ensure that it becomes a rhythm of life and not one of destruction, in other words; the community must have a pulse. The rate of the pulse can be measured by the commitment of the members whereas the strength of the pulse can be measured by the quality of the discussion and ideas generated. From my experience, I anticipate that, that in the main, the excitement of the CoPs will come from the excitement of the “chase”.</i>
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4.3.6.3. **Conclusion**

In an age where business has no geographical bounds, communities of practice have a role to play for organisations that have distributed employees in disparate geographic locations (Milstein & Coutts, 2003). It is obvious though that a “one size fits all” philosophy is not a proposition for efficient and effective community development. Each community will have unique strengths and be faced with different challenges (Gongla & Rizzuto, 2001). The same is true for police organisations that have at times similar needs to private organisations and at times these needs are specific and individual.

By isolating, the three elements and seven principles recommended to cultivate communities of practice, I attempted to highlight the relationships that exist between the recommended core elements and principles within a policing environment. Discussing each principle separately assisted in explaining and



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describing specific characteristics and factors relevant to each and hopefully providing a better understanding of the interplay across each of the categories.

I found that the three core elements and seven principles deemed necessary to develop and cultivate a community of practice are applicable to the policing environment. This is especially true where potential community members have a common purpose and perceive themselves to be part of a common network. Having regard to the number of potential networks that fall within this context it is unlikely that police organisations will be able to fund and facilitate the needs of all communities. Accordingly managers need to be able to determine which communities will have the greatest impact on organisational goals (Lesser & Everest, 2001). The ever-increasing trend towards globalised crime is one major consideration in selecting communities of practice based on courses such as MOSC. Finally, since the selection of course themes for the MOSC program is based on Australasian and world trends, over time through the utilisation of CoPs –the cultivation of expert panels is obvious.

While the ideas presented in this section need to be empirically tested, they nevertheless, expose managers to a new management philosophy that can be used to enhance and complement existing management models. This initial framework not only provides a useful methodology that can be helpful in assisting police managers operate in a global investigative environment, but also a way of spanning organisational and hierarchical boundaries and therefore a powerful solution to harness knowledge. If this framework works for MOSC then it is just the tip of the iceberg, and other potential CoPs could be developed for different specialist areas including homicide, forensics, crime analysis and sexual crimes.

Finally, I believe that by implementing communities of practice, most of the eight factors identified in section two of this chapter could be addressed. Using a linkage point from each of the factors, the diagram below illustrates how the concept of on-line communities of practice can be used in the future as an important tool towards creating a culture of knowledge sharing. Each of the process modules were analysed to find linkages that contributed to knowledge

sharing inhibitors and determine how COPs for Cops could assist in ameliorating these linkages.

**Table 15 - How CoPs for COPS address the eight factors**

	Factor	Outcome linkage	Where CoPS assist
1	Promotion system – 'we to I'	Concentrates on what I did	Provides the opportunity for giving I examples within a 'we' context. For example – I had a problem, I went to the Community, I presented my problem, we discussed this problem and as a result, I was able to....
2	Sworn versus unsworn divide	Creates us and them environment	Combines expert teams of sworn and unsworn. Cops creates an environment of experts rather than individuals
3	Nature of the beast	Sworn socialise with each other	Solves mistrust by providing a medium of on-line socialising between sworn and unsworn
4	Qualification and non qualification divide -	Qualified staff not stimulated	Debate and conversation provides stimulation for qualified staff who are treated as experts
5	Influence of command and control management style	Subservience to rank	Move beyond the hierarchical boundaries and breaks down barriers based on rank.
6	Managerialism (New Public Management)	Emphasis on data collection	Emphasis on knowledge creation and sharing
7	IT- is driven business rather than business driving IT	Reduced socialisation and story telling	Provides a medium for story telling and invites and encourages socialisation.
8	Training courses	Improved individual knowledge base	Provides and sustains knowledge improvement.

#### 4.3.7. Summary

This chapter presented the learning outcomes of my research, within three distinct but integrated sections. **Section one** examined the impact of external and internal forces on organisational knowledge management sharing initiatives over the past ten years on the Western Australia Police. **Section two** investigated the specific factors currently influencing knowledge sharing facilitators and inhibitors within the police service as determined by individual staff members. **Section three** explored the police service's readiness to share knowledge in the globalised environment of the future. The final chapter discusses the impacts of these outcomes in greater detail.

## 5. Chapter - Conclusion and Final Reflections

### Chapter 5 - Conclusion and Final reflections

*Throughout history, the really fundamental changes in societies have come about not from dictates of governments and the results of battles but through vast numbers of people changing their minds—sometimes only a little bit (Harman, 1988, p.155).*

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## 5. Chapter - Conclusion and Final Reflections

I begin this chapter by summarising the preceding four chapters. I then articulate how this thesis contributes to the body of knowledge by presenting the general conclusions relating to my research phenomenon. I do this by providing the theoretical and practical implications emanating from this thesis, specifically in relation to knowledge management and police theory. The final section of this chapter is a reflection of the methodology used in this thesis and the unintended consequences which resulted from my research.

**Chapter 1** - laid the foundations for the study. The chapter explained my rationale for conducting this research. It argued that understanding the factors that promote or impede the sharing of knowledge within police organisations constitutes an important area of research. The chapter also introduced the research question:

*What lessons can be learned from examining the facilitators and inhibitors to knowledge sharing in intelligence-led crime management within the Western Australian Police?*

In addition, it briefly examined the action research design and methodology, definitions of key words and identified limitations and assumptions.

**Chapter 2** - presented a comprehensive literature review of knowledge management theory and was instrumental in developing the conceptual space for my research. The review assisted me, as the researcher, to develop a critical understanding of the field of knowledge management and knowledge sharing within the policing profession. The review established that within the discipline of knowledge management there are many unanswered questions in relation to knowledge sharing.

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While the review is presented essentially as a static literature review, other literature co-evolved with my analysis and interpretation of the data in accordance with the action research approach

**Chapter 3** – discussed the methodology I used to gather the data sources for this thesis. From the outset, I argued that the challenge for this project was to devise a methodology that captured the complexity of the phenomenon and identify and scrutinise not only the major elements involved, but also the connections between them. This chapter explained in detail the rationale for combining the action research and hermeneutic approach in this study and discussed the quality controls used to ensure appropriate research rigour.

**Chapter 4** - presented the findings of my study within the following three contexts:

1. **Historical** - here I explored the influence of external and internal factors or forces on organisational knowledge management sharing initiatives over the past ten years on the Western Australia Police with a specific emphasis on social, technical and political forces. This aspect was explored as a result of suggestions from members of my validation group.
2. **Current** - this section was the initial focus of my research. I investigated the specific factors influencing knowledge sharing facilitators and inhibitors within the police agency as determined by individual staff members.
3. **Future** – in this section, I explored the feasibility of a conceptual framework for the development of communities of practice (CoPs) to assist police agencies share knowledge in a global investigative environment. The concept emerged during my research when I discovered there was need to develop a system that provided police

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officers the opportunity and freedom to discuss and share knowledge without the constraints of the current command and control management style.

**Chapter 5** - In this final chapter, the conclusions, implications and reflections of the research study are presented.

## **5.1. Introduction**

My research has explored and identified a number of insights that will assist the Western Australia Police and others in cultivating organisational environments that are conducive to knowledge sharing. The outcomes support those of Leun & Al-Hawamdeh (2001) that for knowledge sharing to be effective, it requires an organisational culture that not only recognises the value of knowledge sharing but introduces strategies to facilitate such sharing. Without a holistic approach, organisational strategies including investment in IT to assist with knowledge sharing may not yield the behavioural and structural changes required.

The previous four chapters support Broadbent's (1998) assertion that knowledge management represents a quantum shift for most organisations. This shift appears particularly necessary within the policing environment when one considers that the bread and butter activities of police officers, intelligence analysts and investigators are accessing, leveraging and sharing knowledge. The outcomes from this research challenge police managers to recognise knowledge management as a holistic purposeful constructive management philosophy having multiple dimensions and not owned by one group or business unit.

The knowledge sharing challenge, for the Western Australia Police, is to become more organisationally effective by facilitating an environment where employees become more flexible, innovative, collaborative and willing to share knowledge. If the outcomes in this thesis are looked at in isolation, it might appear that the Western Australia Police need only address particular isolated matters and knowledge sharing will be improved. However, when considered as



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a whole, it is clear that the process is more complicated and the police service has much to do to facilitate knowledge sharing. The next sections give an overview of the findings based on the three outcomes, historical, current and future.

#### **5.1.1. Organisational perspective (historical)**

This section explored historical aspects of knowledge sharing within the Western Australia Police. Using the socio-technical model developed by Pan and Scarbrough (1998) it examined how knowledge management initiatives have been implemented over the past ten years. The main finding was that while the police service has been progressing towards an effective information management infrastructure, external factors particularly government policies have had a constraining impact on the progression. An analysis of the progression in relation to the socio-technical aspects indicates that even though the police service made some headway between 1989 -1994, it has not progressed, any further than it was during the Professionalism-epoch 1994 - 1999.

One of the main causes for this lack of progress appears to be a predicable assertion by all government parties, prior to elections, to increase police officers without providing a corresponding knowledge creation infrastructure. When I use the term infrastructure, I do not only mean equipment and information technology, I am also referring to organisational procedures, roles and responsibilities. It was argued that if this situation continues, knowledge management improvements do not augur well for the future of intelligence/knowledge led policing. This assertion, however should not be taken as an indictment on government policy implementation, rather it should be seen as an acknowledgement of Mulgan's (2003) argument that there are inherent complexities at work, which derive both from the nature of government, itself and its duty to create public value. What is satisfying though is that since this exploration, I developed a business case which was instrumental in

convincing the Government to provide funding for an extra 160 unsworn support police staff.

5.1.2. Individual outcomes (current)

Initially this research identified 15 individual factors as having a facilitating or inhibiting influence on knowledge sharing. Through the Action Research and Hermeneutic cyclic process this figure was distilled to 12 factors which were further refined to eight major factors. These factors are recreated below and discussed individually.

	Factor		Facilitator / inhibitor
1	Promotion system – ‘we to I’	Inhibitor	Behavioural interviews for promotional purposes, continue to concentrate on individual knowledge rather than creating and sharing within teams
2	Sworn versus unsworn divide	Inhibitor	Integrated workforce between sworn officers and public sector staff has not as yet materialised.
3	Nature of the beast	Inhibitor Facilitator	Police officers are by nature suspicious of outsiders. This suspicion extends to public service staff. However, sharing can occur when police officers believe public service staff can value-add their outputs.
4	Qualification and non qualification divide -	Inhibitor	Qualified public service employees leave the service due to sworn police officers holding positions based solely on rank rather than skills and competencies. Police officers also felt unrewarded for their educational effort, were more likely to be dissatisfied with the job and under stimulated by the work. They want to be promoted quickly and get involved early in the promotion race otherwise they tend to move on to other employment fields.
5	Influence of command and control management style	Inhibitor	Police officers are trained to be subservient to rank, as such; innovation can be stifled. To leads to micro management style where socialising is not encouraged and therefore sharing of knowledge reduced. Focus of knowledge requirements change with promotion...
6	Managerialism (New Public Management)	Inhibitor	Managers are forced to dismantle frontline positions to cater for government reporting expectations. Takes officers away from the community thereby reducing their intelligence gathering capacity. Decentralisation of districts promotes a "patch mentality". External agency oversight leads to risk averse policies and practices
7	IT driving the business rather than the business driving the IT	Inhibitor	IT has become omnipresent in the agency but it has been described as 'conceptually elegant but functionally restrictive', as such officers find it ironic that they spend much time inputting data but find it difficult to access the information.
8	Training courses	Facilitator	Allows staff to meet in informal settings and exchange knowledge.

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## **1. Promotion system – We to I**

Little research has been conducted into police promotion and what has been done has tended to concentrate on gender issues and cultural issues and not on behavioural interviewing. Having regard to the emphasis placed on behavioural interviewing as a means of promotion and the concerns raised in this research, the need for more research in this area is obvious.

The overarching outcome relating to this factor is the need to integrate current promotion interview practices with the means to reward applicants for sharing knowledge. I spoke to numerous managers to develop solutions to this problem and a method raised on a number of occasions was the adoption of 360 degree interviews. With such interviews, the primary objective is to pool feedback from a number of employees including superiors, peers and subordinates. It was suggested that this information can be used to identify candidates' strengths and weaknesses from a broader base, including candidates' willingness to share knowledge. Such techniques are almost universal among the Fortune 500 companies but are minimal among Australian companies (Stone, 2002). A discussion with staff from the Human Resource department indicates that Australian Police agencies have attempted to implement 360 degree interviews, but the implementation has never been successful. This lack of implementation may support the findings of Stone (2002) who claimed that autocratic hierarchical organisations tend to find 360 degree interview techniques difficult to apply and consequently receives little or no management support. However, future research will be needed to establish if the reasons for the lack of success in implementing the 360 degree interviewing concept within a policing environment conform with those of Stone (2002) or there are other reasons.

Brunetto & Farr-Wharton (2003) found police officers' commitment decreased as they moved from constable to sergeant ranks. They called for further research in this area to identify the cause for this lack of commitment. This research has addressed that call by specifically identifying the influence of a specific promotion system-type on individuals' commitment especially their commitment to share knowledge.

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## **2. Sworn v unsworn divide**

The sworn versus unsworn divide is not peculiar to the Western Australia Police. A similar state of affairs was found in a study of three British police forces where problems between public sector intelligence analysts and police officers were evident. The problems were attributed mainly to low pay, the lack of a well-developed career and an ad-hoc promotion structure for intelligence analysts (John & Maguire, 2004) . It was also found that lack of standardisation of the intelligence products caused confusion among the operational officers who used these products. This in turn posed dangers of developing a vicious circle where those who use the intelligence products lose respect for the efforts involved in developing the product and that those who create the product lose the incentive to put energy into improving the quality.

My research also complements the findings of Thomas & Davis (2002) relating to a police service in England. In this research they found that many police civilian managers resented the failure on the part of their senior officers and the senior uniformed ranks to recognise the value of their professional expertise. This led to reduced commitment on the part of public sector employees.

## **3. Nature of the beast**

The benefits and disadvantages of police officers being sceptical or suspicious by nature is discussed by Miller (1999) who argued that while a character trait such as suspicion may be desirable among police officers, it may not be suitable for other professions. The constant looking for “wrongdoing” may make for an excellent detective but the trait may not be suitable in other work or social environments.

While it is acknowledged that a core role of police officers is to investigate crime, many police officers find themselves, during the later years of their careers, working outside the criminal investigation areas. In many cases, they work alongside public servant employees. In these situations, the sharing of knowledge is necessary. This transition from working with sworn officers to working with public servants should not be difficult, but for some police officers it can be easier said than done. The main reason for this difficulty is that public

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service staff and police officers do not have the same life experiences and as such cannot empathise with each other. For example, police officers' 'working personality' develops out their social environment rather than being a product of pre-existing personality traits (Albanese, 1999). As Harr (2001) argues, the culture and experiences of policing is a powerful force in shaping the attitudes and behavioural traits of officers.

Currently, the positive aspects of scepticism and suspicion outweigh the negative side effects especially when it comes to investigating crime. But police officers sometimes forget that other staff members have important but less visible roles in those investigations and that by sharing knowledge with all staff the complexity of the investigation may be reduced.

This concept of the 'nature of the beast' raises a number of challenges for police managers. While it may be seen as an inhibitor to knowledge sharing, it can also be cultivated to act as a facilitator. If it is to be harnessed as a knowledge sharing asset, public service employees need to appreciate that police officers will share knowledge and accept public servants as part of the team if the police officers believe that sharing such knowledge will be used to improve operational outcomes. If this concept is to be successful, it will not only involve a major shift in thinking by public servants it will also require innovative ways to change work practices that currently absorb operational police availability.

Finally, this research has led to an important question - is the beast a child of the organisation or is the organisation an outcome of the beast? This is an area for future research.

#### **4. Qualification and non qualification divide**

The outcomes in this category are in line with those of Kakar (1998) who found that tertiary educated police officers feel they have an advantage over officers less qualified, especially in the areas of taking responsibility, undertaking leadership roles and displaying initiative. However, they also found that tertiary

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educated police officers were more cynical than those with no tertiary qualifications.

In Western Australia, Kennedy (2003) argued that exposure by police officers to higher education programs was critical in improving the service delivery policing demands of the future. While Kennedy's comments may have merit, they are the outcome of a Royal Commission and not based on empirical research. The outcomes of my research found that police officers with higher education do not feel their education is appreciated and have a propensity to find employment elsewhere. This results in them taking away many years of individual and corporate knowledge. This problem is not new, in fact Kakar (1998) quotes 30 year old research by Regoli (1976) and Swanson (1977) who both found that university educated officers felt unrewarded for their educational effort and were more likely to be dissatisfied with the job and under stimulated by work. It is necessary that police managers, police recruiters and promotion panel participants are aware of this problem. A balance needs to be found between the appointment of police officers to positions based on qualifications and knowledge as opposed to appointments based on rank.

This point has been recognised by our new Commissioner Dr Karl O'Callaghan who has introduced a new philosophy of 'Right Person, Right Place, Right Job'. This will go some way to solving this problem especially in specialised areas. Time will tell if this new approach has been successful.

## **5. Influence of command and control management style**

My research established that in order for police agencies to be more effective, there is a need for senior police officers to tailor their management and leadership styles to reduce the disproportionate emphasis on command and control practices. Accordingly, police managers need to encourage improvement in two key performance areas namely the effectiveness of leaders and the motivation of followers. My research outcomes also identified a definite link between management style, rank and knowledge sharing. The current police management style is based on a bureaucratic command and control philosophy. This style inhibits innovation, which in turn inhibits knowledge



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creation and as such reduces the amount of knowledge that could be shared. This findings have been recently supported by Reige (2005) who asserts that knowledge sharing is less likely to occur in highly structured multi-layered and hierarchical organisations.

The influence of the rank structure and the command and control philosophy on the working and behavioural practices of police officers is not a new finding. McCarrey (1993b) argued that police managers in Western Australia, received little training in the principles and techniques of management and as such base their style on their early training which emphasised a command and control philosophy. The McCarrey report was followed and supported by the Andersen report (1994) which identified that the emphasis placed on the command and control style had led to a negative autocratic leadership philosophy. Similar comments were also made in the recent Western Australia Royal Commission findings which called for a more modern management approach with a reduced emphasis on command and control practices (Kennedy, 2003). The command and control style also attracted unfavourable comment in a review of practices in the Australia Federal police, which found that police services have traditionally tended to focus too much on the aspect of reactive punishment. What is required is an emphasis on personnel management and less interest in the alleged motivations stemming from military-style discipline (Fisher, 2003).

In presenting these observations, I am not ignoring the need for command and control practices when the circumstances require it. I am merely referring to a management model that according to Murray (2002) assumes the commander will always have the right solution; that subordinates have little to contribute; and that the severity of sanctions will deter breaches of the rules .

The change will be difficult to implement, but this research will have been successful if it at least it gets managers to acknowledge the problem, discuss the issues and embark on finding solutions.

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## 6. Managerialism

The aspect of managerialism which has caused most concern in relation to knowledge sharing was the decentralisation of police districts and the devolution of centralised responsibility. This move happened primarily during the Delta program (see chapter four section one), driven by new public management philosophies to improve organisational efficiencies and accountability. The concept espoused empowerment of district superintendents with control over resources and business processes (Western Australia Police, 2001). In effect, superintendents were given the mandate to operate as local chiefs of police (Western Australia Police, 2003a). While in theory, devolution and decentralisation had many benefits it also has a number of drawbacks especially in relation to knowledge sharing.

My learning outcomes indicate that the emphasis on performance reporting under the new public management paradigm is gaining momentum. I am not arguing that police services must not be managed efficiently and with a high degree of accountability. Nevertheless, a problem arises when the very functions that have been put in place to improve efficiency and accountability are to a degree inhibiting efficiency. The final sentences of one of the emails summed it up as follows:

*I agree with the commissioner when he recently spoke about not closing police stations, we are in the business of social rationalism not economical rationalism, so give me a performance system that measures our influence on society not what we are costing society. Otherwise, we may never see the wood from the trees.*

Similar findings were identified previously in the following two Western Australia Police internal reports - *Devolution Decentralisation Report (2003a)* and *Intelligence-Led Policing In The Western Australia Police Service-Proposed Framework (2003b)*. I used both of these reports to verify my research data relating to decentralisation. Both reports corroborate what was said to me in fact they also outline some of the mistakes that have led to this situation. For example, the Devolution/Decentralisation report maintains that in order for decentralisation to be effective the process must clearly identify regional and

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portfolio responsibilities and accountabilities, and delegate authority appropriately. In addition functional responsibility should be accompanied by an appropriate redistribution of human, financial, infra structure and specialist support. In addition, expertise should be available to regions under agreed circumstances, with funding provided to the appropriate area. However, as per the extract below it would appear these principles were not adhered to

... in many instances, these devolution principles and frameworks have not been adhered to and as a consequence, frontline resources have been deployed to undertake the functions, processes or services (Western Australia Police, 2003a).

The reports also maintained that the rate of decentralisation was too rapid leading to a number of inconsistencies leading a loss or degradation of specialist skills across the agency (Western Australia Police, 2003a) especially in relation to intelligence gathering and intelligence dissemination (Western Australia Police, 2003b).

The demand for increased efficiency in the public services started in the 1980s. Yet it was arguably only in the early 1990s that police agencies received the same attention which had been directed at other public services - this came as a shock to many senior police officers who believed that by the nature of the work the police would be insulated from radical market reform (Loveday, 1995). However, to date no evidence has been provided to suggest that the effectiveness of any public service has substantially improved as a consequence of the reforms to which they have been subject. While Loveday's assertion may be ten years old, this research has found efficiency gains have been claimed but these gains seem to be at the expense of reduced service delivery, poor staff morale, motivation and good will. The long term impact and cost of the new managerialism has still to be ascertained (Loveday, 1995). This research goes someway towards understanding the impact of managerialism on police services in relation to knowledge sharing.

## **7. IT driving business rather than business driving IT**

As discussed in Chapter 4, staff members raised the issue of the information and communications technology as a hidden inhibitor of knowledge sharing.

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They described the IT systems as being aesthetically pleasing but functionally restrictive and are not producing the outcomes they were promised. However, when they were questioned further about this matter, most officers acknowledged the need for IT to assist in the fight against crime and the policing's ever increasing accountability and compliance loading.

This finding is not peculiar to the Western Australia Police, in fact Chan et al (2001) found a similar situation in the Queensland Police. On a broader scale, research conducted by Ross & Weill (2002) found that "most organisations are not generating the value from their IT investments that they should be" (p 85). While a number of factors impact this lack of return, the most important factor appears to be senior managers' role in the IT decision making process. They found that when senior managers abdicate decision making responsibility to IT executives "disaster often ensues" (p.85).

It is acknowledged that advances in information and communication technology (ICT) can significantly influence the way in which organisations conduct their business and their overall competitiveness (Bai & Lee, 2003). However, to fully realise these benefits, a degree of re-engineering needs to be undertaken, which may include a subtle shift in management style within the organisation (Hedelin & Allwood, 2002; Irani & Love, 2002).

Thus, police managers should focus on developing a better understanding of the identification and application of ICT within policing environments. The need for such a focus is all the more important when it is considered that police support services have been utilising ICT to assist the 'fight against crime' for many years (Chan et al., 2001), but that acquisitions have not been matched by improvements in police managers' ICT knowledge and skills (Ackroyd, 1993; Enders, 2001). In fact almost 20 years ago when the ICT revolution was seen as an opportunity for police agencies, it was considered a crisis that very few high ranking police administrators were prepared to take advantage of the opportunity (Munro, 1984 p.5). He argued in order for police managers to be in a position to meet future strategic challenges, three areas of police managers' professional development needed attention:

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- Program budgeting;
  - Strategic planning; and
  - Information communication technology.

My cursory analysis of police management educational courses nationally and internationally suggests the areas of strategic planning and to some degree financial budgeting have received attention, with a number of police management courses offering educational units covering those streams. However, even though police agencies investments in ICT have increased significantly over the past 20 years, exposure to educational courses in information communication technology has not materialised. Accordingly, the situation as outlined by Munro some 20 years ago concerning police managers' understanding of technology still remains very much an issue that needs to be addressed.

## **8. Courses**

Of the eight factors presented, the only universally agreed facilitator of knowledge sharing relates to in service training courses. This outcomes is similar to those of Earl (2001) who found that networking was an important element for knowledge sharing. Earl found that sharing in organisations is more likely to work where there is a 'tradition of sociability and networking' (p. 225). Oil companies such as Shell and BP have become famous for this networking and find strong sharing connectedness between members of graduate entry classes.

However, having regard to my research, that the knowledge gained by attending the course was not deemed as important as the knowledge that was shared during breakout sessions and lunch breaks, another avenue for further research my have opened. If it is the actual networking and not the courses that are important, then the Western Australia Police needs to explore further different ways of breaking down networking barriers. For example, the spatial design of its offices may need to be reviewed. Another aspect of the review may

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include the adoption of Communities of Practice and tools required to implement CoPs – which is discussed in the following section.

### **5.1.3. Conclusion – CoPs for COPs**

As mentioned previously this section was not planned as part of the initial research proposal. This section emerged out of a need to explore a way to provide a 'space' where police officers could meet and operate without the impost of the command and control management style. In addition, it was hoped this space could also provide the potential where geographically distributed investigators could come together to investigate crime.

In this section, I explored the benefits of communities of practice and highlighted the readiness of police agencies to develop communities of practice. It should be pointed out here that, that communities of practice are not the panacea to organisations' knowledge creation ailments, or are they meant to replace traditional teams or business units. However, it is widely recognised that communities of practice can be a valuable source of knowledge leveraging to organisations to those that want to emerge as knowledge generating organisations (Lesser & Storck, 2001; Wenger & Snyder, 2000). Accordingly, if communities of practice are understood in relation the development of knowledge sharing they will be recognised as one of the main success contributors in the knowledge and information economy. The strength of communities of practice is self-perpetuating - as they as they generate knowledge they renew themselves.

While it is too early to for a definitive answer, my research indicates that by adopting a strategic community of practice orientation, CoPs for COPs could become an important aspect of knowledge leveraging and innovation within the state, national and global investigative environment. As investigators become more aware of the void that exists beyond jurisdictional boundaries when investigating globalised crime, the benefits of cultivating communities of practice will become a more acceptable way to operate in a distributed environment.

### **Operating Tools**



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All that said, an important element that could hamper any moves towards CoPs for COPs, is the need to select appropriate operating tools. While the essential elements and principles required to develop a community of practice may exist theoretically, the transition from the physical to a virtual environment may not be easy (Hildreth et al., 2000). The absence of a rich face-to-face medium for social interaction (Daft & Lengel, 1986) and opportunities for discursive collaboration, serendipity and 'storytelling' (J. S. Brown & Duguid, 2000) may have a profound effect.

In addition the sustained enablement of the community depends on collaborative technology that will facilitate communication, navigation and creation of knowledge (Gongla & Rizzuto, 2001). Although there are many tools available to assist with the development of communities of practice (Alavi and Tiwana, 2002) the suitable choice of effective and useable collaboration tools is an area requiring further research. These tools will have to fit within the infrastructure constraints of the respective agencies where members of the community reside.

A web-based platform would be an appropriate environment to facilitate the sustained development and nurturing of distributed communities (Milstein & Coutts, 2003). One such internet-facilitated tool that has been embraced by practically every police agency in Australia is the intranet and the use of browsers. Once a relatively unknown utility (Damsgaard & Scheepers, 2001), intranet technology has been described as a malleable technology that can be moulded and shaped to embrace internal social forces (R. Williams & Edge, 1996). Accordingly, intranet portals are a suitable enabling medium in which to facilitate communities of practice and seem to be the most effective way to of knowledge dissemination (Alavi & Haley, 1999). Bulletin boards, e-mail and collaborative software such as Lotus Notes, MS-Exchange and Groove typify the kinds of products that are available for conducting computer-mediated dialogue of the kind suited to community conversations. .

The interest in leveraging internal and external organizational knowledge has witnessed the development of supportive technology tools (Mingail, 2003).

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Electronic collaborative tools provide opportunities for community members to participate either asynchronously (non real-time) or synchronously (real-time) in secure virtual rooms (Perey & Berkley, 2003). For example, instant messaging, audio conferencing and chat utilities offer synchronous communication capability, while discussion forums and file sharing offer asynchronous options.

Internet portals, even though they support the same technology as Intranets, are open to security attacks and vulnerable to information warfare. This is an important consideration, given the increasing sophistication of criminal organisations. It is obvious that investigative-related communities of practice will require security features to control who is allowed to log-on and access community data. Some tools provide administrators with the ability to create private shared activity spaces. For instance, clients may be allowed to view certain community features but would be denied access to areas where the conversation or documents are deemed private and confidential. Other key requirements of collaborative tools should include:

- An integrated search capability — especially important if the community grows in depth and breadth;
- Tracking and monitoring tools to determine levels of participation and encourage reluctant community members;
- Survey or polling tools to get consensus from community members;
- Capability to efficiently upload documents and organize these resources;
- Content editing capabilities for non-technical administrators; and
- Data encryption and secure routing.

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## **5.2.      *So what have I found?***

In traditional organisations, knowledge is power. It is this power that gives people the ability to promote themselves in a competitive environment where many others are competing for the best and most interesting jobs and the highest amount of remuneration that it is possible to obtain. However, if this quest for individual power was substituted with strategies to improve organisational knowledge, the benefits are endless. As Despres & Chauvel (2000) argue, individuals are the sense makers in organisations and knowledge has no meaning without its introduction into a social context. Therefore, knowledge management research should focus on reshaping the organisation in which individuals enact and then live in (p. 83).

My research has to some extent addressed this call. The purpose of my research was to make sense of the inhibitors and facilitators of knowledge sharing in the Western Australia Police. It was also to provide a frame of reference to both practitioners and researchers. The concentration on one police agency, allowed me to explore, in detail, the facilitators to knowledge sharing within the context of that agency. It has opened the way for other researchers to do the same within other police agencies and in turn draw comparisons and identify differences so that the body of knowledge relating to police and knowledge sharing can be further enhanced.

Finally, my research found that improved knowledge management, specifically knowledge sharing is vital in enhancing the competitive advantage of policing. It also found that successful knowledge management is not a technical stand-alone or one off strategy. Instead, it is a people strategy that must be predicated on efficient business processes supported by an appropriate suite of human resource, organisational and information technology practices and strategies.

As mentioned in Chapters 1 and 2, the first step to knowledge sharing success is the identification of knowledge sharing barriers. I present this research as evidence that this has now been conducted. The next step in the process is the

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real challenge for the Western Australia Police - providing the conditions that facilitate and encourage such sharing. Policing today demands a more sophisticated approach to knowledge sharing. Contemporary police officers are well trained, usually well educated and intellectually mobile. It follows that knowledge sharing techniques which have been explored extensively in private industry need to be adapted. My research has shown that there is a broad consensus within the Western Australia Police for such a change. It has also provided a rich organisational insight of the conditions that need to be designed to provide those conditions. The design strategies include human factors or motivational aspects such as:

- HR policies and performance appraisal systems that support knowledge sharing with a specific emphasis on finding a balance between 'we' and 'I' in the promotion process;
- Promoting knowledge sharing as worthwhile because of its contribution to the work of individuals and the organisation;
- Aligning rewards and recognition to support appropriate behaviours;
- Facilitating communication with key people and groups both within and beyond the police service through learning communities and communities of practice to draw out and leverage tacit knowledge;
- Using of cross portfolio teams to include sworn police officers and public service staff working as together;
- Integration of knowledge sharing activities in training educational courses, including encouraging the discussion of lessons learned from previous courses, operations or projects; and
- Shifting current management style from autocratic command and control to transactional and transformational which are based on the principle of exchange and inspiration.

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### **5.3.      *Final Reflections***

It is appropriate at this stage of the research to ask the following questions:

- Was my methodology appropriate to achieve the research objectives?
- Did my research achieve its objective? and
- What were the intended and unintended consequences?

#### **5.3.1. Reflection on my research**

Prior to conducting this thesis, I consulted with a number of researchers who had used both Action Research and Hermeneutic Enquiry but had not combined the two as I have done in this thesis. One question I asked of each researcher was “did the methodology work?” While I received a number of responses to this question, the most thought provoking response came from Associate Professor Irene Froyland who simply replied – “I believe so, but that is for the reader to decide”. In relation to my thesis, the same answer is appropriate. However, leaving the reader solely with this response would not suffice and as such, the following gives an overview as to why I think the methodology was appropriate.

Having been involved with the police research unit for a number of years, I knew that many academics had conducted research on Western Australia police officers. I was also aware, that a number of officers had complained of being ‘research exhausted’ or ‘research fatigued’. I felt therefore that a more appropriate approach for me was to conduct the research with my colleagues within their actual work environment, rather than on my colleagues. Even though a number of researchers had tried an ethnographic approach in the past, the task proved difficult as those being researched felt threatened of criticism and tended to operate as a tightly closed supportive group that ostracised the researcher. This in turn skewed the research findings. On the other hand, my transition between researcher and employee seemed relatively easy. So why was it different for me?

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I have no doubts that since I was already employed by the Western Australia Police, I was accepted. The fact that I had been involved in operational policing, I was trusted. This was made patently clear at an unsworn staff conference when a senior police officer during a speech about the difficulties faced by police officers, singled me out and said “you know what I mean Vince, you have felt our pain”. These comments confirmed my understanding of the problems faced by those being researched. In addition to my background, I feel that I was researching a question that many others had not only asked in the past, but also discussed widely with colleagues and formed strong and varying opinions. They saw my research as an opportunity to have their thoughts and opinions presented in a structured research thesis with the objective of finally understanding and addressing the phenomenon.

### **5.3.2. Consequences – intended and unintended**

Whether or not this thesis was presented for examination, I am confident that the mere fact of discussing the phenomenon within the context of knowledge theory with my colleagues has had a positive impact on the Western Australia Police as a whole. While my thesis is presented in a structured format my research project did not always reflect a straight forward or linear sequence of events. My final document is a culmination of me, as a researcher and employee, working through a number of cycles. Each cycle involved a number of conscious and unconscious actions with intended and unintended consequences. This was followed by periods of reflection with my supervisor, my work colleagues, my validation group and myself. On the other hand, there was also a deep underlying order and commitment to my research. At times this commitment bordered on selfishness. For example, the analysis was time consuming continually demanding my intellectual independence and honesty. At times, I completely removed myself from my family and friends and immersed myself in my research. I have no doubt that this practice was necessary, but as yet, I am not sure of the domestic consequences.



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### **5.3.3. Making claims to the body of knowledge**

My research has added to the body of knowledge in the following ways:

#### **5.3.3.1. The generation of new meaning**

According to McNiff, Lomax and Whitehead (2003) the social intent of an action research project is to improve the researcher's particular environment by researching and working with other people. I can now support this assertion. In my case, the collaboration between my colleagues and me allowed us to construct meaning out of our shared practices.

On a very basic level, the use of terms such as tacit and explicit knowledge, comparisons between intelligence and knowledge, and debates between information and knowledge are now more commonplace within the Western Australia Police. As Whitehead explains in (Laidlaw, Mellett, & Whitehead, ND) the very fact of walking around and talking about what I was doing is the "whole power of it". It captivated the imagination of people because they actually recognised themselves in the research and they wanted to be involved. For example, I have been stopped in corridors, approached in the work café and spoken to at formal meetings and social gatherings by police officers and police staff each enquiring about my research and each adding their input.

I am aware that two of my published papers, Hughes & Love (2004) and Hughes & Jackson (2005), have been used as discussion papers for the new strategic planning process. These papers were direct outcomes of this research. I was informed by one of the senior planning officers that as a result of my papers she was able to better develop key performance indicators relating to intelligence-led policing outcomes.

At a higher level, I was appointed as manager of the Office of the Commissioner. This position sits on the Commissioner's Executive Team which is the highest level decision making committee within the Western Australia Police. Many of the HR, technology, and structural issues that arise during these meetings have direct links to my research and as such, I have been able to articulate with confidence solutions to many of those problems.

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Prior to my appointment as manager of the Office of the Commissioner, I wrote a paper arguing that the management of knowledge creation within police organisations could not be sustained if external and contradictory influences such as government election commitments continued to favour government election strategies at the expense of knowledge creation. In that paper I argued that there was a need for harmonisation of police service strategy and government policy, otherwise development of an intelligence-led or knowledge creation policing philosophy would be frustrated. I maintained that the police agency needed to find a way to ensure that knowledge generated in the course of law enforcement investigations is made available for future intelligence purposes. I emphasised that the problem would not be solved by undertaking a number of isolated projects, instead the issue required real reform.

It appears that this concern has now been recognised by the Western Australia police, which has recently appointed three reform coordinators, to explore ways to ensure that reform is implemented and sustained across the organisation. In addition, based on the ongoing findings of my thesis I prepared a paper for the Commissioner's Executive Team which was presented to the Government articulating the rationale for funding for additional 160 police support staff, to complement the 350 sworn officers promised in the Government's election campaign. This funding was approved by the Government and is probably the first time a Western Australia Government has funded both sworn and unsworn police officers at the same time.

This new approach by Government will be instrumental in removing a major inhibitor to knowledge sharing and assist the police service to support police officers and investigators within the intelligence units with appropriate support intelligence staff (knowledge agents).

#### **5.3.3.2. Making tacit knowledge explicit**

I am confident that the mere fact of making my tacit knowledge explicit through collaboration and story telling, that those involved with my research, directly and indirectly did likewise. This collaboration raised our understanding of the

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phenomena to a conscious level and as such, the flow of tacit knowledge was instrumental in my development of the initial 15 findings of inhibitors and facilitators to knowledge sharing. Later when I presented these findings to my colleagues, a new understanding of the research was obvious and the new flow of tacit knowledge assisted in refining my findings to 12 and later to the final eight.

#### **5.3.3.3. Contributing to the wider body of knowledge**

I do not purport the strength of my research to be in possessing refined answers to fixed questions, rather its strength mirrors the comments of Kilduff & Mehra (1997) when quoting Cronbach (1986) and Kunn (1970), they argued that social science is cumulative, not in possessing ever-more refined answers about fixed questions, but in possessing a rich repertoire of questions. For that reason, the expansion of my knowledge has also been accompanied by the expansion of my ignorance. Nevertheless, it is from these learning outcomes that others can gain an understanding of the knowledge sharing phenomenon within policing; it is from the many unanswered questions that interested researchers can begin to explore the phenomenon in greater detail.

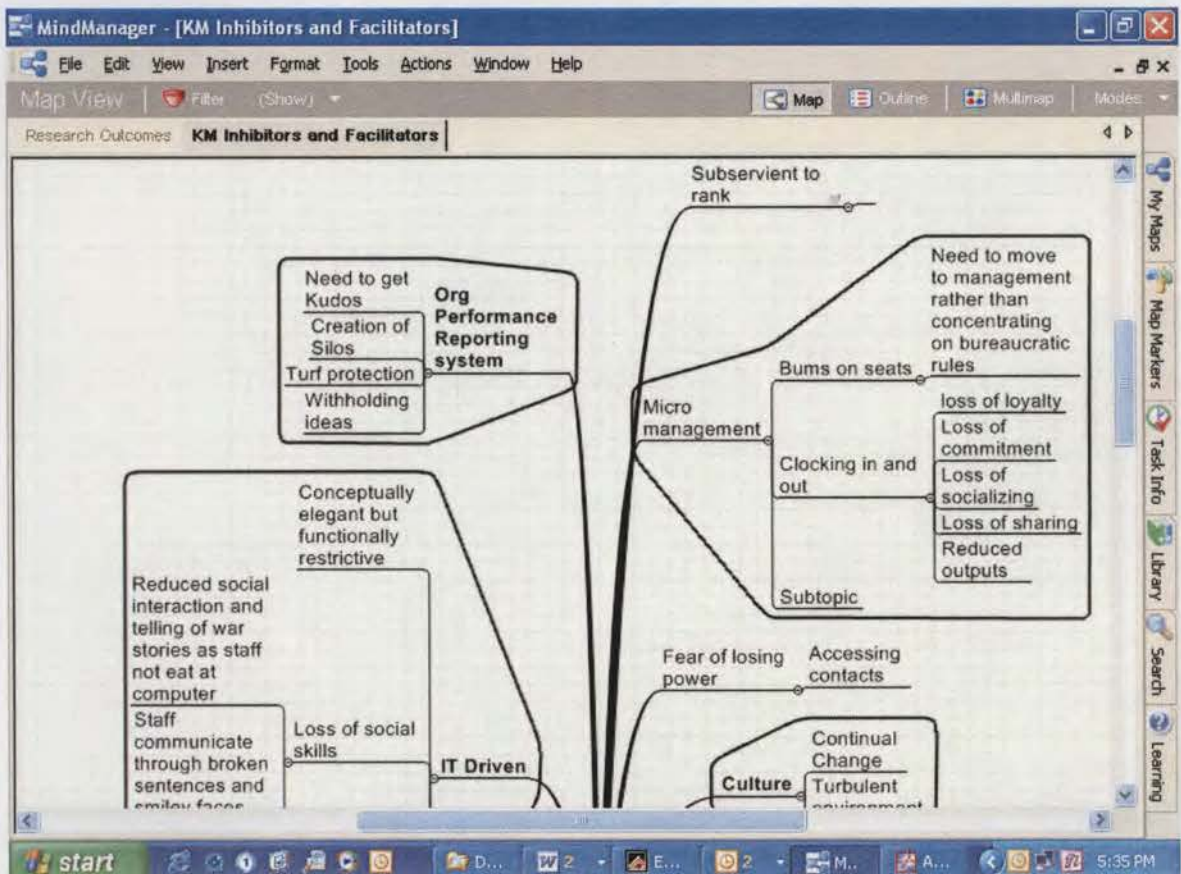
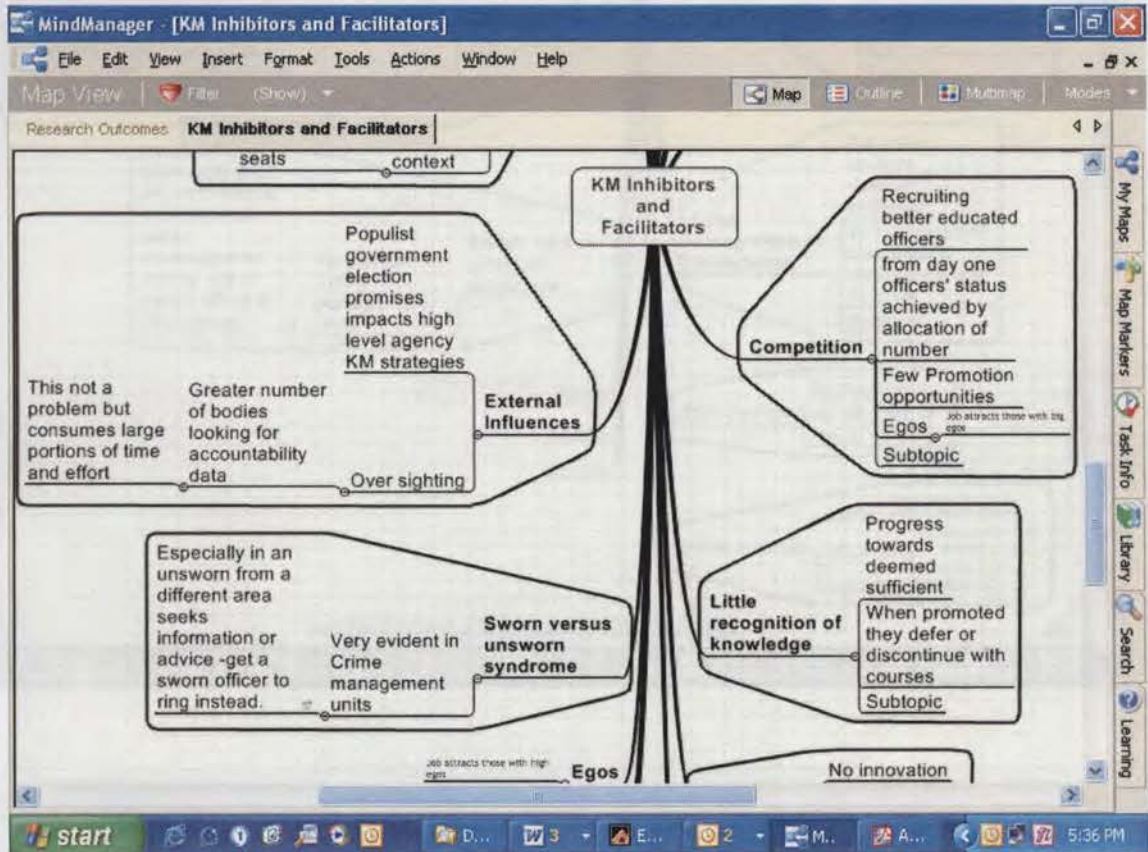
Finally, as I reach the end of my research, I feel I can say with some confidence that my use of action research supported by hermeneutic analysis, this thesis has contributed to the wider body of knowledge in providing a greater understanding of the inhibitors and facilitators to knowledge sharing within this policing environment. My vision is that the Western Australia Police will become the pioneer of knowledge management within policing. Hopefully this research will provide the tools needed by police managers to ensure that knowledge management and sharing becomes an organisational philosophy. As I have said previously, it will not be easy to make the changes required. However, no matter how difficult it is, both socially and organisationally, it will be worth the effort especially once managers begin to realise that the law of diminishing returns does not apply to knowledge as it does to capital resources.

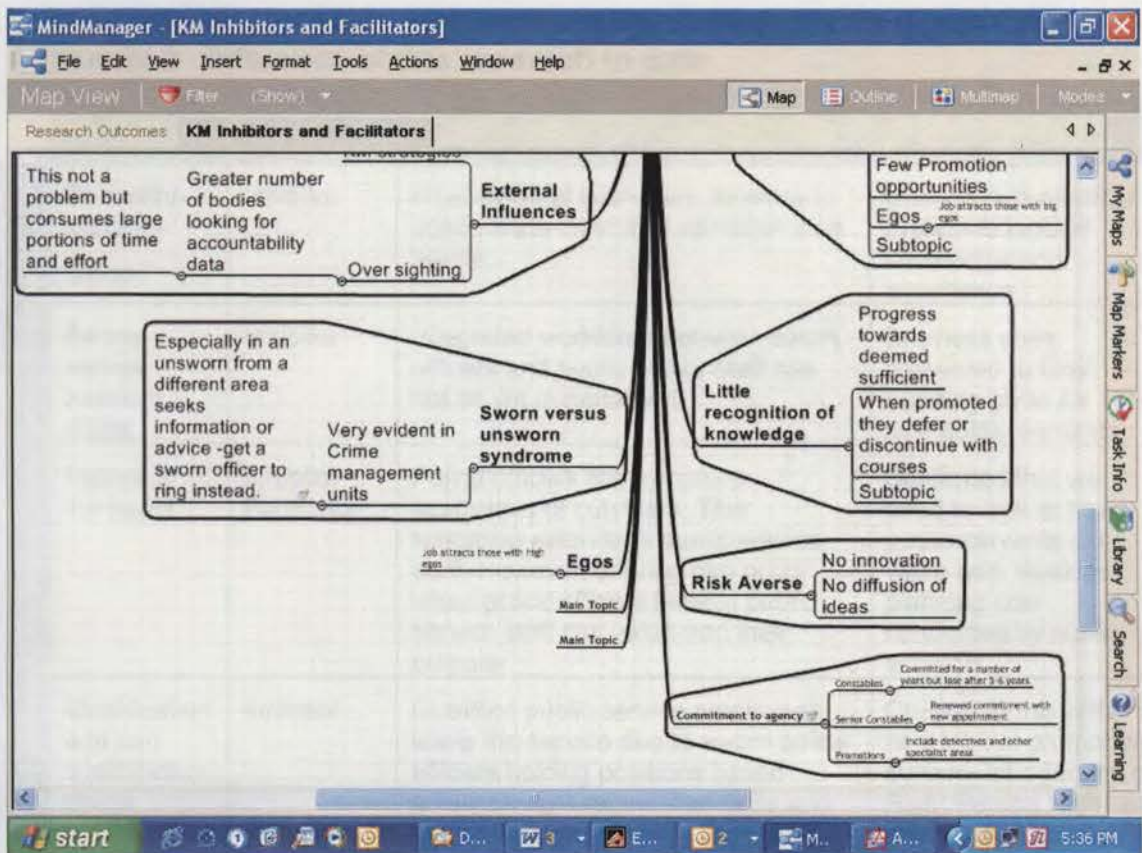
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# Appendices

## Appendices

### Appendix 1 – Analysis using MindManager Software







## Appendix 2 - Influence of this research to date

	Factor		Facilitator / inhibitor	AR Influence
1	Promotion system – 'we to I'	Inhibitor	If behavioural interviews continue to concentrate on individual rather than teams.	Change to promotion system to include knowledge and experience
2	Sworn versus unsworn divide	Inhibitor	Integrated workforce between sworn officers and public sector staff has not as yet materialised.	Business case presented to Govt. Funding given for 160 new public servants
3	Nature of the beast	Inhibitor Facilitator	Police officers are by nature suspicious of outsiders. This suspicion extends to public service staff. However, sharing can occur when police officers believe public service staff can value-add their outputs.	Confirmed that we need to look at how public servants can value add. Business planning now conducted by public servants
4	Qualification and non qualification divide	Inhibitor	Qualified public service employees leave the service due to sworn police officers holding positions based solely on rank rather than skills and competencies.  Police officers also feel unrewarded for their educational effort, were more likely to be dissatisfied with the job and under stimulated by the work.	Change to this with new look at promotion system. Introduction of Right Person Right Job philosophy
5	Training courses	Facilitator	Members meet in informal settings and exchange knowledge.	Hopefully we will see the development of COPS for Cops
6	Command and Control	Inhibitor	Police officers are trained to be subservient to rank, as such; innovation can be stifled especially if senior officers are not open to feedback and input..  Concentration on bodies in seats and time spent at desk (managing the wrong things) rather than concentrating on an outcome focus approach causes staff to only do what they are required to do and no more. This style also leads to loss of socialising and loss of story telling accordingly sharing of knowledge is inhibited.	This research has highlighted a move towards a new style of management that discourages bureaucracy and encourages contemporary management skills. COPS for Cops will also facilitate socialising and encourage innovation
7	Managerialism (New Public Management) and External overlooking Influences	Inhibitor	Sometimes managers are forced to dismantle frontline positions to cater for government reporting expectations such as strategic plans, business plans sustainability plans and equal opportunity plans this takes officers away from the community thereby reducing their	Frontline first philosophy Commissioner will not allow police officers to be taken from front line duties to complete back office tasks – new 160 civilian

			intelligence gathering capacity.	officers to facilitate this change
8	IT- Driven rather than IT- led	Inhibitor	<ul style="list-style-type: none"> <li>IT has become omnipresent in the agency but it has been described as 'conceptually elegant but functionally restrictive', as such officers find it ironic that they spend much time inputting data but find it difficult to access the information.</li> </ul>	Conducted review into office of information management. Part of an advisory committee to look at IT within the organisation.

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### **Appendix 3 – Validation Group and Comments**

Mr Greg Italiano, – Director Organisational Performance - B. Sc (Hons)

Mr Ross Napier, – Director Strategic Policy - B.Soc.Sc, MBA

Mr Colin Grant– Manager Intellectual Property Grad Dip (Public Sector Management)

Mr Mick Emmanuel - Superintendent Prosecuting - MBA

Mr Laurie Panania – Superintendent Research and Projects B. Com, Master Criminal Justice

Ms Beba Haskovic – Senior Planning Officer - B Ed, Grad Dip (IS), MBA

Mr Mark Parget – Intelligence Analyst - Dip Crime Analysis

Ms Michelle Verdon – Manager Training and Development (Intelligence) - Dip Crime Analysis

Mr Dave Allen – Crime Analyst - Dip Crime Analysis

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## Appendix 4 - Comments from Validation Group

### Abstracts of Email Comments

I initially thought that the task of knowledge sharing, and the unlocking of the important and valuable tacit knowledge that comes to police officers through experience and know how, would be far too difficult to contemplate. Especially in light of the cultural, rank structure and other aspects that greatly inhibit openness and sharing amongst officers and staff.

After reading and understanding your viewpoints however, I have found that in bringing these eight factors together, as you discuss, facilitates and provides a positive direction and wonderful future for sharing and managing knowledge in the WA Police. The actions provided for will bring an exciting change to the organisation, will make the task of intelligence lead policing far more advanced and will place it at the leading edge of policing within the contemporary policing global community.

Colin Grant  
Manager Intellectual property  
Western Australia Police

Vince

Thanks for giving me the opportunity to read and comment on your thesis.

Congratulations in exercising the courage to adopt a style that is contemporary, not without risk but nevertheless a style that suits you and your research topic.

Information and knowledge are absolutely the central ingredients to all successful business enterprises, providing they are well managed. This body of work is very important to policing and has the potential to inspire critical thinking about the way the Western Australia Police manages information. Policing is not conducted in a vacuum and lessons learned within this study and as a consequence of it, will be transportable for other agencies, both private and public, to adopt.

Mick Emmanuel  
Superintendent Prosecuting  
Western Australia Police

Vince I like the work and think that it will be very useful for this agency. However, I cannot get used to your use of the first person throughout this research. Maybe I am from the old school. Nevertheless, you have convinced me that it can be done...

Laurie Panania  
Superintendent Research and Projects  
Western Australia Police

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This is a good piece of work, well written and interesting to read. When you first raised the idea with me, I was somewhat sceptical of your hermeneutic approach. But as you progressed (much better than my doctorate, which I have since deferred) I know we have had a number of conversations about your research and now I can see that maybe I was a tad narrow in my research approach. The juxtaposition of the action research with the hermeneutics worked for me - well done

Greg Italiano  
Director Organisational Performance  
Western Australia Police

Vince sorry about not getting back to sooner, but I have since transferred to the Crime and Corruption Commission and time has been a premium. This research has been very useful to me since I first said I would become part of your validation group. Our discussions have been very thought provoking. Now that it is nearing an end, I can say that you have captured the causes that many of us already knew but now you have articulated it one document that will be very useful for reform..

Mark Padget  
Corruption Crime Commission

Vince I have had great pleasure reading your thesis. I was particularly impressed with the different approach you selected for gathering and analysing information. When undertaking a Doctorate most people follow the usually methodology and keep in line with what processes have already been proven, a safe way to research and present findings. In my view, your innovative approach reflects confidence in your work as well as the personal and professional growth you have acquired. I have recently been contemplating completing a DBA myself and, as is natural, have been considering the benefits to be obtained and the commitment it will require. By providing me with the opportunity to have an input and to comment on your thesis, it has inspired me and given me a great desire to continue with similar kind of research. You have discovered that there are so many areas needing further research within the policing environment and wider. Well done.

Beba Haskovic  
Strategic Planning  
Western Australia Police

Well what can I say except I bet you are glad it is over well nearly anyway ... when I began reading this version I actually wanted to read more... I especially like the introduction now, it gives good context and a basis for the reset of the research and as you say, you have probably unleashed more questions than answers...

Michelle Verdon  
Manager Training and Development (Intelligence)  
Western Australia Police

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Vince I thought I would let you know that since our discussion about lack of innovation and creativity in police I have been successful in having the concept of innovation and knowledge in policing included as a direction in the 'Directions in Australasian Policing 2005-2008'. I will give you a copy shortly but here is an abstract

1.2 Emerging Issues

Enhancing the capacity to anticipate and respond to emerging issues through innovative approaches to scanning the policing environment, understanding and using technology, and building an appropriate base of knowledge and skills within police organisations.

The doc can be found on <http://www.acpr.gov.au/pdf/Directions05-08.pdf>

Ross  
Director Strategic Policy  
Western Australia Police



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